<u>Minutes of the 255th meeting of the State Level Expert Appraisal Committee held on 05th August</u> 2021 through Video Conference (VC) on National Informatics Centre (NIC).

In the wake of recent crisis of COVID-19, lockdown situation, the agenda of the present meeting was mailed to expert Committee in advance and a Video conference meeting on NIC was organized in this regard on 05/08/2021 at 13.30 hrs.

The 255th meeting of the State Level Expert Appraisal Committee (SEAC) was held online by Video conferencing 5th August 2021 at 13.30 hrs. Following members joined the meeting:

1.	Shri Akshay Kumar Saxena, Chairman, SEAC
2.	Dr. S. C. Pant, Vice Chairman, SEAC
3.	Dr. M. N. Patel, Member, SEAC
4.	Shri D. C. Chaudhari, Member, SEAC
5.	Shri J. K. Vyas, Member, SEAC
6.	Shri Anand Zinzala, Member, SEAC
7.	Shri B. M. Tailor, Member, SEAC
8	Shri A. V. Shah, Secretary, SEAC

The Committee considered the additional agenda of applications made by project proponents, additional details submitted as required by the SEAC/SEIAA and details furnished in the Form-1, PFR, EMP reports etc.

1.	SIA/GJ/IND2/197901/2021	M/s. Subhasri Pigments Pvt. Ltd.	EC-Amendment cum
			Merger
		Plot no. J-1201, 1202, 1211, 1213, 1208, 1209 8	Reconsideration
		1209/A , 1207, 1212 GIDC Industrial Estate Ankleshwar, Dist:-Bharuch, Gujarat.	,
	M/s Subhasri Pigments are	two sister concerned units involved in manufacturing	of "Synthetic Organic

 M/s Subhasri Pigments are two sister concerned units involved in manufacturing of "Synthetic Organic Chemicals" which was accorded Environmental Clearance vide letter no. SEIAA/GUJ/EC/5(f)/519/2019 dated 01/04/2019 and SEIAA/GUJ/EC/5(f)/1104/2020 dated 30/09/2020.

Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/197901/2021 dated 13.02.2021 for EC-Amendment cum Merger as mentioned below:

Sr.	Condition no. in A	s per EC		As	per p	proposed	Justification	
no.	which (S	SEIAA/GUJ/	EC/5(f)/519/2019,	amendm	nent			
	Amendment is S	EIAA/GUJ/E	C/5(f)/1305/2020					
	proposed. (E	EC-Corrigen	dum),					
	s	EIAA/GUJ/E	C/5(f)/1104/2020)					
			PRODUCTIC	ON DATA				
Sr.	Name of the	CAS	Quantity	/ (MT/Mo	nth)		End-use of	_
no	Products	no.		(1111)1110)		the products	
1101	Troducts	1101	Plot No J- 1202,	Plot	Plot	Total		
			1208, 1209,	No J -	No J -			
			1209/A, 1211,	1207	1212			
			1213					
1	CPC Groop 7	74260	250	100		250	Coloring	
1.	CPC Green-7	74200	230	100		550	Coloring	
							agent	
2.	Copper	74160	80			80	Colouring	
	Phthalocyanine Blue						agent	
	Crude							
3.	Pigment Violet		3.5			3.5	Colouring	
	Tonner IC-77 (Lake						agent	
	Violet)							
4.	Pigment Violet		0.5			0.5	Colouring	
	Tonner IC-72						agent	
							0	
5.	Pigment Persian	74160	3.6			3.6	Paint &	
	Blue						Textile	
							Industries	
6	Beta Blue	74160	200			200	PVC Plastic	
0.	Deta Ditte	/4100	200			200	Pubber	
							KUUUCI	
7.	Pigment Rubine	15850	1			1	Chalks,	
	Tonner						Plastic,	
							Rubber	

8.	Pigment Lake Red	15585	0.5			0.5	Colouring	
							agent	
0	Digmont Marcon	15000	0.5			0.5	Diactio &	
9.	Torner	13880	0.5			0.5	Flastic &	
	Tonner						Coating	
10.	Alpha Blue	74160	100			100	Ceramic,	
							Cosmetic,	
							Ink	
11.	Optical brightening	12224-			6	6	Brightening	
	agent	02-1					agent	
12.	2-Amino Phenol 4	98-30-			2.5	2.5	In dyes	
	Methyl Sulphone	6						
	Total (Organic		639.60	100	8.5	748.		
	Products)					1		
]	N-ORGANIC PROD	UCT				
13.	Ammonium	7783-	350.00			350	As Soil	
	Sulphate	20-2					conditioner.	
14	Coppor Sulphoto	7759	70.00			70	Dharma	
14.	Copper Sulphate	08 7	70.00			70	Filalilla Industry	
		90-7					muusu y	
	TOTAL		1059.6	100	8.5	1168		
						.1		
			A.2 WA	TER :				
1	21	Total water	requirement for the	Total w	vater req	luiremen	t Due to the	plot merging
		project shal	l not exceed 1169	for the	project	shall no	t application a	and additional
		KL/day. Uni	t shall recycle 501	exceed	1379 KL/	day. Uni	t 179 KLD	discharge
		KL/day [RC	D permeate -209	shall rec	ycle 439	.5 KL/da	y permission.	Total fresh
		KL/day, ME	Condensate – 207	[RO per	meate -8	1 KL/day	v, water requir	ement will be
		KL/day & In	ternal recycle – 354	MEE C	ondensat	e – 5	3 increased 17	6 KL/Day.
		KL/day, Bo	iler steam – 84	KL/day &	& Internal	recycle	– We may bi	ring on your
		KL/Day) sha	all be reused for	305.5 K	(L/day)	shall b	e notice that	6 KLD water
		process and	Hence, fresh water	reused	for proc	cess an	d consumption	permission is
		requirement	shall not exceed	Hence,	fresh	wate	r increased	after

		668 KL/day and it shall be met	requirement shall not	amendment due to the
		through GIDC water supply only.	exceed 921.5 KL/day and it	consent no AWH: - 87737.
		Prior permission from the	shall be met through GIDC	Total water :- 1169 KLD +
		concerned authority shall be	water supply only. Prior	204 KLD + 6 KLD
		obtained for withdrawal of	permission from the	
		water.	concerned authority shall	
	21	Total water requirement of the	be obtained for	
		project shall not exceed 204	withdrawal of water.	
		KLD. Unit shall reuse 132.5 KLD		
		of treated industrial effluent		
		within premises. Hence, fresh		
		water requirement shall not		
		exceed 71.5 KLD and it shall be		
		met through GIDC water supply		
		only. Prior permission from the		
		concerned authority shall be		
		obtained for withdrawal of		
		obtailled for manaratian of		
		water.		
2	23	water. The industrial effluent	The industrial effluent	Due to the plot merging
2	23	water. The industrial effluent generation from the project	The industrial effluent generation from the	Due to the plot merging application.
2	23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day	The industrial effluent generation from the project shall not exceed	Due to the plot merging application. We may bring on your
2	23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion.	The industrial effluent generation from the project shall not exceed 893.8 KL/day after	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste
2	23 23 23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion. The industrial effluent	The industrial effluent generation from the project shall not exceed 893.8 KL/day after proposed expansion.	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste water generationis
2	23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion. The industrial effluent generation from the project	The industrial effluent generation from the project shall not exceed 893.8 KL/day after proposed expansion.	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste water generationis increased after
2	23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion. The industrial effluent generation from the project shall not exceed `141.5 KL/day	The industrial effluent generation from the project shall not exceed 893.8 KL/day after proposed expansion.	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste water generationis increased after amendment due to the
2	23 23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion. The industrial effluent generation from the project shall not exceed `141.5 KL/day after proposed expansion.	The industrial effluent generation from the project shall not exceed 893.8 KL/day after proposed expansion.	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste water generationis increased after amendment due to the consent no AWH: - 87737.
2	23 23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion. The industrial effluent generation from the project shall not exceed `141.5 KL/day after proposed expansion.	The industrial effluent generation from the project shall not exceed 893.8 KL/day after proposed expansion.	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste water generationis increased after amendment due to the consent no AWH: - 87737. Total Waste water
2	23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion. The industrial effluent generation from the project shall not exceed `141.5 KL/day after proposed expansion.	The industrial effluent generation from the project shall not exceed 893.8 KL/day after proposed expansion.	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste water generationis increased after amendment due to the consent no AWH: - 87737. Total Waste water generation :- 747.5 KLD +
2	23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion. The industrial effluent generation from the project shall not exceed `141.5 KL/day after proposed expansion.	The industrial effluent generation from the project shall not exceed 893.8 KL/day after proposed expansion.	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste water generationis increased after amendment due to the consent no AWH: - 87737. Total Waste water generation :- 747.5 KLD + 141.5 KLD + 4.8 KLD
2	23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion. The industrial effluent generation from the project shall not exceed `141.5 KL/day after proposed expansion. The domestic waste water	The industrial effluent generation from the project shall not exceed 893.8 KL/day after proposed expansion.	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste water generationis increased after amendment due to the consent no AWH: - 87737. Total Waste water generation :- 747.5 KLD + 141.5 KLD + 4.8 KLD
2	23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion. The industrial effluent generation from the project shall not exceed `141.5 KL/day after proposed expansion. The domestic waste water generation shall not exceed	The industrial effluent generation from the project shall not exceed 893.8 KL/day after proposed expansion.	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste water generationis increased after amendment due to the consent no AWH: - 87737. Total Waste water generation :- 747.5 KLD + 141.5 KLD + 4.8 KLD Due to the plot merging application.
2	23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion. The industrial effluent generation from the project shall not exceed `141.5 KL/day after proposed expansion. The domestic waste water generation shall not exceed 47.50 KL/Day and it shall be	The industrial effluent generation from the project shall not exceed 893.8 KL/day after proposed expansion. The domestic waste water generation shall not exceed 54.5 KL/Day and it	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste water generationis increased after amendment due to the consent no AWH: - 87737. Total Waste water generation :- 747.5 KLD + 141.5 KLD + 4.8 KLD Due to the plot merging application. We may bring on your
2	23	water. The industrial effluent generation from the project shall not exceed 747.5 KL/day after proposed expansion. The industrial effluent generation from the project shall not exceed `141.5 KL/day after proposed expansion. The domestic waste water generation shall not exceed 47.50 KL/Day and it shall be treated with industrial waste	The industrial effluent generation from the project shall not exceed 893.8 KL/day after proposed expansion. The domestic waster generation shall not exceed 54.5 KL/Day and it shall be treated with	Due to the plot merging application. We may bring on your notice that 4.8 KLD waste water generationis increased after amendment due to the consent no AWH: - 87737. Total Waste water generation :- 747.5 KLD + 141.5 KLD + 4.8 KLD Due to the plot merging application. We may bring on your notice that 1 KLD domestic

24			increased after
	Industrial effluent 62 KLD, along		amendment due to the
	with 6 KLD sewage shall be		consent no AWH: - 87737.
	treated in primary and tertiary		Total Waste water
	ETP unit followed by RO plant.		generation :- 47.5 KLD + 6
			KLD + 1 KLD
26	232 KLD of waste water stream	305.5 KLD of waste water	Due to the plot merging
	shall be internally recycled for	stream shall be internally	application.
	industrial purpose only.	recycled for industrial	
26	73.5 KLD of waste water stream	purpose only.	
	shall be internally recycled for		
	industrial purpose only.		
29	Treated waste water of 230.2	Treated waste water of	Due to the plot merging
	KLD shall be discharged into	409.2 KLD shall be	application and additional
	CETP of NCT, Ankleshwar	discharged into CETP of	179 KLD discharge
	through underground pipeline	NCT, Ankleshwar through	permission.
	after achieving prescribed	underground pipeline	We may bring on your
	norms.	after achieving prescribed	notice that as per the
		norms.	consent no AWH: - 87737,
	RO permeate 41 KLD shall be	RO rejected 23 KLD shall	unit is having permission
	reused back in process (5 KLD)	be sent to CMEE of M/s	to send 4.8 KLD effluent
	and cooling (36 KLD). RO	.BEIL, Dahej for	into M/s. ETL.
	rejected 23 KLD shall be sent to	evaporation through GPS	
	CMEE of M/s .BEIL, Dahej for	fitted tankers.	
	eveporation through GPS fitted	4.8 KLD effluent will be	
	tankers.	sent to M/s. ETL.	
30	Treated waste water of 2272	Treated waste water of	Due to additional 179 KLD
	KID shall be subjected to two	58.3 KLD shall be	discharge permission.
	stage PO system	subjected to two stage RO	
	Stuge no system.	system.	
31	RO reject of 71.3 KID shall be	RO reject of 18.3 KLD shall	Due to additional 179 KLD
	subjected to in-house MFF.	be subjected to in-house	discharge permission.
		MEE.	







			A.3 AIR			
			(CONDITION I	NO 37)		
SR. no.	Source of emission With Capacity e.g. Boiler (8 TPH)	Stack Height (meter)	Name of the fuel	Quantity of Fuel MT/hr& MT/Day	Type of emissions i.e. Air Pollutants	APCM
	EXISTING UTILI	FY OF PLOT	NO J-1201,120	2,1211,1213, 1208,	, 1209 & 1209/A	
1	Steam Boiler (IBR)- Green Plant (2.0TPH) Thermic Fluid Heater –Green-7	11	Natural Gas	125 m ³ /Hr 45 m ³ /Hr	PM SO2 NOx	
	(4.0 Lac Kcal)					
2	Power Plant boiler/DG-125KVA	11	Natural Gas		PM SO2	
					NOx	
	Thermic Fluid Heater-CPC Blue		Natural Gas	120 m ³ /Hr		
3	(10.0 Lac Kcal)				PM	
	Steam Boiler (IBR) (6.30 TPH)	11		475 m ³ /Hr	SO2 NOx	
	Steam Boiler		Natural Gas		PM	
4	(1 TPH)	11		65 m ³ /Hr	SO2	
					NOx	
5	Steam Boiler		Natural Gas	46 m ³ /Hr	PM	

					NOx	
	Hot Air Generator		Agro Waste/		PM	Bag
c	(45000 //	10	Briquettes		602	Filter
6	(45000 Kcal/Hr)	18		12.5 Kgs/Hr	502	
					NOx	
	Steam Boiler (IBR)		Natural Gas		PM	
7	(4.50 TPH)	11		$400 \text{ m}^{3}/\text{Hr}$	SO2	
-	(400 m / m		
					NOx	
			Diesel		PM	
8	DG - 1000KVA	11		100 Liter/hr	SO2	
					NOx	
	Thermic Fluid		Natural Gas		PM	
	Heater- CPC Green	11		60 m³/Hr	\$02	
9	-7 Blue	11			302	
	(5.0 Lac Kcal)				NOx	
		EXISTIN	IG UTILITY OF PI	OT NO: J- 1207		
	Thermic Fluid		Natural Gas		PM	
10	Heater (3.0 Lac	11		$34 \text{ m}^3/\text{Hr}$	SO2	
	Kcal/hr)			,	NOx	
			Diesel		PM	
11	DG – 100 KVA	11		12.5 Liter/hr	SO2	
					NOx	
	1	EXISTIN	IG UTILITY OF PI	OT NO: J- 1212		I
	Boiler		Agro waste/		PM	
12*		15	Briquette	10 MT/Month	SO2	
					NOx	

 As we have obtained 179 KLD effluent discharge permission, our MEE capacity will be reduced hence steam consumption will also be decreased. So we are removing utility of plot no J- 1212 and using existing utility to cater the demand of steam for products of unit J-1212.

SR. no.	Source of emission With Capacity e.g. Boiler (8 TPH)	Stack Height (meter)	Name of the fuel LIST OF UTI	Quantity of Fuel MT/hr& MT/Day LITY	Type of emissions i.e. Air Pollutants	APCM
1	Steam Boiler (IBR)- Green Plant (2.0TPH) Thermic Fluid Heater –Green-7 (4.0 Lac Kcal)	11	Natural Gas	125 m ³ /Hr 45 m ³ /Hr	PM SO2 NOx	
2	Power Plant boiler/DG-125KVA	11	Natural Gas		PM SO2 NOx	
3	Thermic Fluid Heater-CPC Blue (10.0 Lac Kcal) Steam Boiler (IBR) (6.30 TPH)	11	Natural Gas	120 m ³ /Hr 475 m ³ /Hr	PM SO2 NOx	
4	Steam Boiler (1 TPH)	11	Natural Gas	65 m ³ /Hr	PM SO2 NOx	

AFTER EC AMENDMENT

	Steam	n Boile	er		Natural	Gas			PM		
5	(0.6 T	PH)		11			4	$6 \text{ m}^3/\text{Hr}$	SO2		
									NOx		
	Hot A	ir Ger	nerator		Agro W	aste/			PM	Bag	
6	(4500	0 Kca	l/Hr)	18	ыциен	les	12	.5 Kgs/Hr	SO2	Filler	
									NOx		
	Steam	n Boile	er (IBR)		Natural	Gas			PM		
			()					3			
7	(4.50	TPH)		11			40	00 m /Hr	SO2		
									NOx		
					Diesel				PM		
8	DG - 1	1000K	VA	11			10	0 Liter/hr	SO2		
									NOv		
									NOX		
	Thern	nic Flı	uid		Natural	Gas		2	PM		
9	Heate	er- CP	C Green	11			6	0 m³/Hr	SO2		
	-7 biu	ie							NOx		
	(5.0 L	ac Kca	al)								
	Thern	nic Flu	uid		Natural	Gas		_	PM		
10	Heate	er (3.0	Lac	11			34	4 m ³ /Hr	SO2		
	Kcal/ł	nr)							NOx		
					Diesel				PM		
11	DG –	100 K	VA	11			12.	5 Liter/hr	SO2		
									NOx		
 					A	.3 AIR				1	
		T			(CONDI	TION N	IO 39)	ſ		1	
		Sr.	Specific	Source	Type of	Stack	k/Ve	Air Pollu	tion Control		
		no	of em	ilssion	emissio	n	τ	Me	easures		

	(Name of the	n	Height	(APCM)	
	Product &		(meter)		
	Process)		(
	11000337				
EXIS	TING PROESS GAS	EMISSION	OF PLOT N	IO J-1201,1202,1211,1213,	
120	8, 1209 & 1209/A				
1	Chlorination	HCI	15	Water Scrubber followed	
L	Reactor	Cla		by Alkali Scrubber	
	Reactor	NH ₃	15	Acid Scrubber	
2					
	(CPC Blue Plant)				
	Hot Air	PM	11	Bag Filter	
	Generator for				
3	SED-Green-7				
	Si D'Giccii 7.				
	(1.8Lac Kcal)				
	Hot Air	PM	9	Bag Filter	
	Generator for				
4	SFD-CPC Blue				
	(7.0Lac Kcal)				
	Hot Air	PM	13	Bag Filter	
	Generator for				
5	SFD(130000				
_	Kcal/Hr)(BFTA				
	Real				
	Bidey				
	Drowning Vessel		15	Two stage water	
6		HCI		scrubber	
	Hot Air	PM	11	Bag Filter	
7	Generator for				
	SFD(130000				
	Kcal/Hr)(Alpha				

	Blue)							
EXISTING PRCOESS GAS EMISSION OF PLOT NO J-1207								
	Chlorination	HCI	15	Two stage Water				
8	Reactor	Cl ₂		Scrubber followed by				
				Alkali Scrubber				
	Drowning Vessel	нсі	15	Two stage water				
9	Drowning vesser	Tier	15	scrubber				
	EXISTING PRC	CESS GAS I	EMISSION OF	PLOT NO J-1212				
10	Sulphonation	SOx	13	Two stage alkali scrubber				
10								
	AFTE	R EC-AMEN	DMENT APPI	LICATION				
	Specific Source		Stack/Vo					
Sr.	of emission	Type of	nt	Air Pollution Control				
no	(Name of the	emissio		Measures				
	Product &	n	Height	(APCM)				
	Process)		(meter)					
		PROESS (GAS EMISSIO	Ν				
	Chlorination	HCI	15	Water Scrubber followed				
1	Reactor	Cla		by Alkali Scrubber				
<u> </u>	Reactor	\overline{NH}_3	15	Acid Scrubber				
Ζ	(CPC Blue Plant)							
				D 514				
	Hot Air	РМ	11	Bag Filter				
3	Generator for							
	טיטיפיוי-/.							
	(1.8Lac Kcal)							
4	Hot Air	PM	9	Bag Filter				
	Generator for							
	1							

о.		the Ac	et et	Bulos	1200					
о.			+i\/i+\/	HW/	1208,		1212			
	waste	(Name	e of	e as per	J- 1202,	-1207	No J -			
n	Hazardous	genera	ation	Schedul	Plot No	Plot No J	Plot	Total		
•	e of	Source	e of	y and		(MT/Annu	ım)	r	t of HW	
Sr	Type/Nam	Specifi	ic	Categor		Quantit	У		Managemen	
A.4 S	OLID/HAZARI	DOUS W	ASTE							
	0.10.4									
		10	Sulph	onation	SOx	13	Two st	age alkal	i scrubber	
		9	DIOW	ning vessel	нсі	12	scrubb	stage er	water	
			Drow	ningVassal		15	Alkali S	stars	water	
		8	React	or	Cl ₂		Scrubb	er follo	owed by	
	Chlorinat		ination	HCI	15	Two	stage	Water		
			Blue)	-						
			SFD(1 Kcal/I	.30000 Hr)(Alpha						
			Gene	rator for						
			Hot A	ir	PM	11	Bag Filt	ter		
		6	Drow	ning Vessel	HCI	15	Two scrubb	stage er	water	
			Blue)			45	T			
			Kcal/I	Hr)(BETA						
		5	SFD(1	.30000						
			Hot A Gene	ir rator for	PM	13	Bag Filt	ter		
			(7.0La	ac Kcal)						

I.ContainedCon					1213				
1. ETP From 35.3 4015 1440 5455 Collection, sludge/ Effluent Storage, Transportati on, Disposal sludge Facility Storage, Transportati on, Disposal sludge Facility Storage, Transportati sludge Facility Storage, Transportati sludge Facility Storage, Transportati sludge Form Plant 5.1 1.937 6 0.03 7.967 Collection, Storage, and Storage, Transportati on, Disposal at and Storage, Transportati on, Disposal at and Storage, Transportati on, Disposal at Internation Storage, Transportati on, Disposal by Sell									
sludge/ Effluent Image Storage, Gypsum Treatment Image Facility Image Transportati sludge Facility Image Image Image Image Image sludge Facility Image Image Image Image Image Image sludge Facility Image	1.	ETP	From	35.3	4015	1440		5455	Collection,
Sypsum Treatment Image Facility Image Facility Image Image <td></td> <td>sludge/</td> <td>Effluent</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Storage,</td>		sludge/	Effluent						Storage,
sludge Facility Fa		Gypsum	Treatment						Transportati
 Image: Strange of the s		sludge	Facility						on, Disposal
 Image: Strange of the s									at by
 Image: Strange of the s									Cement
 Image: Stand Stan									factory or
 Isee and the second of the seco									TSDF site
 Isea of the second secon									authorized
2.Used OilFrom Plant5.11.93760.037.967Collection, Storage, Transportati on, Disposal by Selling registered refiners.3.DiscardedFrom Raw33.18212100194Collection, Storage, Transportati on, Disposal by Selling registered refiners.4.EmptyFrom Raw33.1852450159Collection, Storage, Transportati on, Disposal by Selling transportati4.EmptyFrom Raw33.1852450159Collection, Storage, Transportati on, Disposal by Selling transportati on, Disposal by Selling transportati on, Disposal by Selling transportati on, Disposal by Selling transportati on, Disposal by Selling transportati on, Disposal by Selling transportati on, Disposal by Selling to									by the
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 A. Empty From Raw A. A. Empty From Raw A. B. A. B. B. A. B. A. B. A. B. B.			Machinery						Transportati
 A Empty From Raw A A Empty From Raw A Starage, A Empty From Raw A Starage, A A A A A A A A A A A A A A A A A A A									on. Disposal
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 A Empty From Raw A A A Empty From Raw A A A Empty From Raw A A A A A A A A A A A A A A A A A A A									Selling
Image: Section of the section of th									registered
ADiscardedFrom Raw33.18212100194Collection, Storage, Transportati on, Disposal 									refiners.
containersMaterialAdderiaAdderialAdderialAdderialAdderialAdderialAdderialAdderialAdderialAdderialAdderialAdderialAdderialAdderialAdderi	3.	Discarded	From Raw	33.1	82	12	100	194	Collection,
A Empty barrels From Raw bags / Liner From Raw barrels A Empty barrels From Raw bags / bags / bag		containers	Material						Storage,
Empty barrelsend<		1	Packing						Transportati
barrelsbarrelsbarrelsbybarrelsbarrelsbarrelsbarrelsbybarrelsbarrelsbarrelsbarrelsbarrelsbarrels4.EmptyFrom Raw33.1852450159Collection,bags /MaterialAnterialAnterialAnterialAnterialAnterialAnterialAnterialAnterialLinerPackingInternetInternetInternetInternetInternetInternetInternetAnterialInternetInternetInternetInternetInternetInternetInternetAnterialInternetInternetInternetInternetInternetInternetAnterialInternetInternetInternetInternetInternetInternetAnternetInternetInternetInternetInternetInternetAnternetInternetInternetInternetInternetInternetAnternetInternetInternetInternetInternetInternetAnternetInternetInternetInternetInternetInternetAnternetInternetInternetInternetInternetInternetAnternetInternetInternetInternetInternetInternetAnternetInternetInternetInternetInternetInternetAnternetInternetInternetInternetInternetInternetAnternetInt		Empty							on, Disposal
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Image: second									authorize
4.EmptyFrom Raw33.1852450159Collection,bags /MaterialInterPackingInter									recycler.
bags / Material Storage, Liner Packing Transportati 0n, Disposal by 500 Selling to	4.	Empty	From Raw	33.1	85	24	50	159	Collection,
Liner Packing Transportati Image: A strain of the strain of t		bags /	Material						Storage,
on, Disposal by Selling to	1	Liner	Packing						Transportati
by Selling to									on, Disposal
Selling to									by
									Selling to

							authorize	
							recycler.	
5.	MEE Salt*	From MEE	35.3	840		 840	Collection,	
							Storage,	
							Transportati	
							on, Disposal	
							at available	
							TSDF site	
							authorized	
							by the	
							GPCB.	
6.	Dust from	From	26.2	0.010		 0.010	Collection,	
	air	filtration					storage,	
	filtration	system					reuse in the	
	system						process	
							within	
							factory	
							premises.	
7.	Solid	From PAC	26.1	36		 36	Collection,	
	Waste	manufactur					Storage,	
		ing					Transportati	
							on, Disposal	
							at available	
							TSDF site.	
8.	IMPURITY	From	26.1	84		 84	Sell to GPCB	
	+	Ammonium					approved	
	COPPER	sulphate					Recycler.	
9.	Hydrochlo	From CPC	26.3	7500	3564	 11064	Sale to	
	ric Acid	Green-7					actual user	
		(Scrubber)					having	
							permission	
							under rule-9	
							or who have	

							applied	
							under rule-	
							9.	
11	Spent	From Alpha	26.3	47520		 47520	Sale to	
	sulphuric	Blue					actual user	
	acid (18%						having	
	to 20%)						permission	
							under rule-9	
							Or who have	
							applied	
							under rule-9	
12	Spent	From CPC	26.3	6480		 6480	Sale to	
	sulphuric	blue					actual user	
	acid (15%						having	
	to 17%)						permission	
							under rule-9	
							Or who have	
							applied	
							under rule-9	
13	Spent	From	36.2		0.6	 0.6	Collection,	
	Carbon	Carbon					Storage,	
		Filter					Transportati	
							on and send	
							to co-	
							processing	
14	Aluminiu	From CPC		43800	12000	 55800	Collection,	
	m	Green -7					storage and	
	Chloride						convert it	
	solution						into Poly	
							aluminium	
							chloride	
							solution	
							through SOP	
							& sell to	
							open	

					market.	
15 Sodium hypo chlorite (6%- 8%)	From CPC Green -7	 8460	2640	 11100	Prepared Sodium hypo chlorite solution (8% to 10%) through SOP & sell to open market.	

As per EC via no SEIAA/GUJ/EC/5(f)/519/2019 dated on 1st- April- 2019 and EC corrigendum via EC no SEIAA/GUJ/EC/5(f)/1305/2020 dated on 5th - November- 2020 of plot No. J-1201, 1202, 1211, 1213, 1208, 1209 & 1209/A, the MEE salt permission is 1935 MT/Annum which will be reduced to 840 MT/Annum.

CHANGE NO 1:-

M/s. Subhasri Pigments Pvt Ltd is located at plot No. J-1201,1202, 1211, 1213, 1208, 1209 & 1209/A, GIDC Industrial Estate, Ankleshwar, Dist.Bharuch. We had obtained EC via no SEIAA/GUJ/EC/5(f)/519/2019 dated on 1st-April- 2019 and EC corrigendum via EC no SEIAA/GUJ/EC/5(f)/1305/2020 (EC Corrigendum) dated on5th - November- 2020.

They had also obtained EC on adjoining plot no: -J-1207 via no-SEIAA/GUJ/EC/5(f)/1104/2020forCPCGreen-7of 100MT/Month.

They have also recently purchased plot no J-1212 adjoining plot of our unit. On this plot, we are also having valid CCA AWH-87737 valid up to 16-July- 2022. Now, the unit would like to merge the entire plot in EC-Amendment application. The plot amalgamation has also been done. Plot amalgamation letter is obtained.

CHANGENO2:-

They may also inform you that as per our EC via no SEIAA/GUJ/EC/5(f)/519/2019 dated on 1st- April-2019 & SEIAA/GUJ/EC/5(f)/1104/2020, Sodium hypo chlorite solution and PAC are considered as hazardous waste. In EC amendment, they are seeking permission to consider PAC and Sodium Hypochlorite into in-organic product instead of hazardous wastes. We may further inform you that we will convert both the waste into valuable in-organics products by following the SOP prepared by GPCB. Hence, we are eligible to get permission as an in-organic products..

CHANGE NO3:-

M/s. Subhasri Pigments Pvt Ltd located at plot No. J-1201, 1202, 1211, 1213, 1208, 1209 & 1209/A, GIDC Industrial Estate, Ankleshwar, Dist. Bharuch are having EC: SEIAA/GUJ/EC/5(f)/519/2019 dated on 1st- April- 2019 and EC corrigendum via EC no SEIAA/GUJ/EC/5(f)/1305/2020 dated on 5th - November- 2020. Now the unit has obtained additional 179 KLD discharge permission into M/s. NCTL. Hence, total effluent discharge quantity will be increased from 230.2 KLD to 409.2 KLD.

Conditions of water & waste water of EC no. SEIAA/GUJ/EC/5(f)/1104/2020 (Plot No J-1207) & CCA AWH-87737 (1212) will not be changed. In EC no. SEIAA/GUJ/EC/5(f)/1104/2020, the unit is a member of M/s. BEIL. As per the CCA- AWH-87737, the unit is a member of M/s. ETL for 4.8 KLD which will also continue.

Present status of the EC obtained for which amendment sought:

- on1stApril SEIAA/GUJ/EC/5(f)/519/2019,dated &SEIAA/GUJ/EC/5(f)/1305/2020 • 2019 (EC 5th Corrigendum), dated on November 2020 (PLOT NO: J-1201,1202,1211,1213,1208,1209,&1209/A) - The unit has applied for the CCA.
- SEIAA/GUJ/EC/5(f)/1104/2020, dated on 30th September 2020 (PLOT NO: J-1207) The unit has obtained CTE. Still unit has not applied for the CCA.
- 2. Details regarding proposed changes:
- SEIAA/GUJ/EC/5(f)/519/2019&SEIAA/GUJ/EC/5(f)/1305/2020 (EC Corrigendum) Conditions are written down in red font. (PLOT NO: J-1201,1202,1211,1213,1208,1209,&1209/A)
- > SEIAA/GUJ/EC/5(f)/1104/2020 Conditions are written down in green font.(PLOT NO: J-1207)
- Note: We may inform you that on plot no J- 1212, the unit is having valid consent no, AWH-87737 in which unit is having 6 KLD fresh water permission and 4.8 KLD discharge permission. (Industrial :- 3.8 KLD + Domestic :- 1 KLD) – Changes due to this consent in proposed amendment is written down in blue font.(PLOT NO: J-1212)
- PP was called for presentation in the SEAC meeting dated 22.03.2021.
- During the meeting dated 22.03.2021, technical presentation made during the meeting by technical expert of PP, M/s Jyoti Om Chemical Research Centre Pvt. Ltd. and project proponent.
- PP presented that they have applied for following EC-Amendment cum Merger:
 - ✓ Plot amalgamation of adjoining plots.
 - To convert sodium hypo chlorite solution and Poly aluminium chloride solution from hazardous waste to in-organic products by preparing it though SOP.

- ✓ To get additional 179 KLD discharge permission into M/s. NCTL.
- ✓ PP presented plot amalgamation letter for M/s Subhasri Pigments Pvt Ltd at Plot No. J-1201, 1202, 1211, 1213, 1208, 1209 & 1209/A, J-1207 & J-1212, GIDC Ankleshwar.
- Committee noted that M/s Subhasri Pigments Pvt Ltd located at Plot No. J-1201, 1202, 1211, 1213, 1208, 1209 & 1209/A, GIDC Ankleshwar and M/s Subhasri Pigments Pvt Ltd located at Plot No. J-1207, GIDC Ankleshwar has obtained EC from SEIAA, Gujarat are two sister concerned units.
- ✓ Further, M/s Supernova Intermediates Pvt. Ltd. located at Plot No. J-1212, GIDC Ankleshwar has not obtained EC and obtained CCA of the GPCB.
- Committee deliberated on considering PAC and Sodium Hypochlorite as in-organic products instead of hazardous wastes for which SOP under Rule-9 of Hazardous and Other Waste Rules-2016 is prepared by CPCB.
- Committee insisted that for manufacturing of PAC, Aluminum Chloride is to be mentioned as hazardous waste and for manufacturing of Sodium Hypochlorite, spent Sodium Hypochlorite is to be mentioned as hazardous waste.
- Upon asking regarding CCA-Amendment of name change of M/s Supernova Intermediates Pvt. Ltd. to M/s Subhasri Pigments Pvt Ltd, PP informed that they have not obtained CTE/CCA-Amendment for name change.
- After detailed discussion, it was decided to defer the project and consider the proposal only after submission of the following documents along with adequate brief presentation of proposed project:
 - 1. GIDC Plot transfer letter from M/s Supernova Intermediates Pvt. Ltd. to M/s Subhasri Pigments Pvt Ltd.
 - Copy of CTE/CCA-Amendment for name change from M/s Supernova Intermediates Pvt Ltd to M/s Subhasri Pigments Pvt Ltd.
 - 3. The purpose of application for amalgamation of three units for which earlier two separate Environmental Clearances are obtained.
 - 4. The revised Site Plan/ layout with color coding of two separate components as approved in earlier ECs and distance between each components. Also submit the fire evacuation plan mentioning the sprinklers system, fire extinguishers, assembly points, etc.
 - 5. The Fire NOC obtained for the existing /on-going plant.
 - 6. The addendum to EIA report.
 - 7. The Resolution of Board of Director for amalgamation of three units.
 - 8. The Certificate of Registration after amalgamation of three units.
 - 9. The notarized undertaking regarding no changes in facilities and everything remains same as per the existing Environmental Clearances/Permissions. Give technical justification in tabular format.
 - 10. Revised hazardous waste matrix mentioning Aluminium Chloride and spent sodium hypochlorite as hazardous waste.
- PP submitted reply of above query generated on SEAC VC meeting dated 22/03/2021, through e-mail.
- This proposal is reconsidered in SEAC meeting dated 05.08.2021. PP along with their technical

expert/consultant, M/s. Jyoti Om Chemical Research Centre Pvt. Ltd remains present in the meeting and made presentation before Committee.

- PP presented M/s. Supernova Intermediates located at Plot No: 1212 which is transferred to M/s. Subhasri Pigments Pvt Ltd and Copy of CCA-Amendment for name change from M/s Supernova Intermediates Pvt Ltd to M/s Subhasri Pigments Pvt Ltd.
- Looking to purpose of plot amalgamation in one name of M/s. Subhasri Pigments Pvt Ltd, Committee insisted for clarification regarding change of product namely CPC Alpha blue mfg plant (earlier proposed on plot no J-1201,1202,1211,1213,1208,1209 & 1209/A), Sodium hypochlorite solution mfg plant, PAC mfg plant, OHC centre, Fire hydrant network storage tank etc to plot no- 1212 along with authenticated proof regarding change of location of CPC Alpha blue mfg plant at earlier proposed on plot no J-1201,1202,1211,1213,1208,1209 & 1209/A into plot no-1212. Technical expert of PP informed that they have obtained Amalgamation order for all plot merger in name of M/s. Subhasri Pigments Pvt Ltd and reason of shifting namely CPC Alpha blue mfg plant (earlier proposed on plot no J-1201, 1202,1211,1213,1208,1209 & 1209/A), Sodium hypochlorite solution mfg plant, PAC mfg plant, OHC centre, Fire hydrant network storage tank etc for reason of safety point of view but not addressed properly during meeting. Hence Committee insisted for technical justification regarding location change in EC order with authenticated MoEF & CC Office Memorandum regarding it and purpose of it for safety purpose with concrete reason for change of production plant and other facility with technical details in place of remaining as per EC accorded at plot no- J-1201,1202,1211,1213,1208,1209 & 1209/A. Also Committee insisted for submission of layout plan at the time of EC application submitted for EC order of M/s. Subhasri Pigments Pvt. Ltd, located at plot no J-1201,1202,1211,1213,1208,1209 & 1209/A and revised layout plan with shifting of facility of CPC Alpha blue mfg plant, Sodium hypochlorite solution mfg plant, PAC mfg plant, OHC centre, Fire hydrant network storage tank etc from earlier proposed on plot no J-1201,1202,1211,1213,1208,1209 & 1209/A and now on plot no-1212 with color coding of it in both layout plan

Looking to reply of query of meeting dated 22/03/2021 presented by PP, Committee insisted for submission of following revised documents along with addendum in EIA reports and subsequent changes in Water, Air and Hazardous waste matrix, EMP and EC-amendment form uploaded in Parivesh portal,

- Revised Hazardous waste matrix with mentioning disposal of Aluminium chloride solution and Sodium hypo chlorite (6%- 8%) as per Hazardous Waste Rules'2016 in place of Collection, storage and convert it into Poly aluminium chloride solution through SOP & sell to open market and Prepared Sodium hypo chlorite solution (8% to 10%) through SOP & sell to open market along with justification regarding misleading information submitted by PP regarding it.
- Submission of copy of Surrender of M/s ETL, Ankleshwar membership certificate, looking to single disposal of waste water to M/s NCTL, FETP in place of dual disposal of waste water to M/s ETL, Ankleshwar and M/s NCTL, FETP.
- Revised water balance diagram considering existing CCA for industrial waste water disposal quantity into M/s NCT in place of proposal submitted by waste water disposal to M/s NCTL, FETP , considering GPCB permission letter dated 19/12/2018 for additional waste water discharge to M/s 255th meeting of SEAC-Gujarat, Dated 05.08.2021

NCT allocated by GPCB to the unit.

- After detailed discussion, it was once again decided to consider the proposal in one of upcoming meeting only after satisfactory submission of the following documents:
 - Technical justification regarding location change in EC order with authenticated MoEF & CC Office Memorandum regarding it. Also purpose for location change of concrete reason, for change of product namely CPC Alpha blue mfg plant (earlier proposed on plot no J-1201,1202,1211,1213,1208,1209 & 1209/A), Sodium hypochlorite solution mfg plant , PAC mfg plant, OHC centre, Fire hydrant network storage tank etc to plot no- 1212 with technical details in place of remaining as per EC accorded at plot no- J-1201,1202,1211,1213,1208,1209 & 1209/A. which is differ than the notarized undertaking regarding no changes in facilities and everything remains same as per the existing Environmental Clearances/Permissions.
 - 2. Submission of layout plan at the time of EC application submitted for EC order of M/s. Subhasri Pigments Pvt. Ltd, located at plot no J-1201,1202,1211,1213,1208,1209 & 1209/A and revised layout plan with shifting of facility of CPC Alpha blue mfg plant, Sodium hypochlorite solution mfg plant, PAC mfg plant, OHC centre, Fire hydrant network storage tank etc from earlier proposed on plot no J-1201,1202,1211,1213,1208,1209 & 1209/A and now on plot no-1212 with color coding of it in both layout plan.
 - 3. Revised Hazardous waste matrix with mentioning disposal of Aluminium chloride solution and Sodium hypo chlorite (6%- 8%) as per Hazardous Waste Rules'2016 in place of Collection, storage and convert it into Poly aluminium chloride solution through SOP & sell to open market and Prepared Sodium hypo chlorite solution (8% to 10%) through SOP & sell to open market along with justification regarding misleading information submitted by PP regarding it.
 - Submission of copy of Surrender of M/s ETL, Ankleshwar membership certificate, looking to single disposal of waste water to M/s NCTL, FETP in place of dual disposal of waste water to M/s ETL, Ankleshwar and M/s NCTL, FETP.
 - Revised water balance diagram considering existing CCA for industrial waste water disposal quantity into M/s NCT in place of proposal submitted by waste water disposal to M/s NCTL, FETP, considering GPCB permission letter dated 19/12/2018 for additional waste water discharge to M/s NCT allocated by GPCB to the unit.
 - Addendum in EIA reports considering all above changes for amalgamation application and subsequent changes in Water, Air and Hazardous waste matrix, EMP, CER and EC-amendment form, uploaded in Parivesh portal.

2.	SIA/GJ/IND2/195698/2021	M/s. C	hemc	rux Enterprises		EC-Reconsideration	
		Plot Ankles	No shwar,	4712-14,Gidc Dist - Bharuch	Estate	Ankleshwar,Ta-	

Category of the unit: 5(f)

Project status: Expansion

- Project proponent (PP) submitted online application vide no. SIA/GJ/IND2/195698/2021on dated 03.02.2021for obtaining Environmental Clearance.
- Project proponent has submitted Form 1, Pre-Feasibility Report & Environment Management Plan as per Notification issued by MoEF&CC vide S.O. 1223(E) dated 27th March, 2020 regarding consideration of proposals or activities in respect of Active Pharmaceuticals Ingredients (API) as B2 category.
- This is an existing unit proposed for manufacturing of synthetic organic chemicals [API and API Intermediates] as tabulated below.

				Quantity MT/Month		Quantit y	
Sr. no.	Name of the Products	CAS no. / CI no. Existin g		Propose d Increase/ Decreas e	Total	MT/An num	End-use of the products
1. BE	NZOIC ACID DERIVATIVE:						
1.	Para Chloro Benzoic Acid	74-11-3					ntermediate of /lebendazole
2	Ortho Chloro Benzoic Acid	118-91-2					Intermediate of Mefenamic Acid &Mesalamine
3	Meta Chloro Benzoic Acid	535-80-8					Intermediate of Bruproprion
4	Para Nitro Benzoic Acid	62-23-7					Intermediate of Folic Acid
5	Ortho Nitro Benzoic Acid	552-16-9					Intermediate of Tolfenamic Acid
6	Meta Nitro Benzoic Acid	121-92-6					Intermediate of Ertapenem
7	2,4 Di Chloro Benzoic Acid	50-80-0	50	0	50	600	Intermediate of Furosemide
8	3,4 Di Chloro Benzoic Acid	51-44-5	50	0	50	000	Intermediate of Sertraline
9	2,3 Di Chloro Benzoic Acid	50-45-3					Intermediate of Lamotrigine
10	Sodium Arabonate (Arabonic Acid Sodium Salt)	30418-45- 2					Intermediate of Xylenol
11	Meta Bromo Benzoic Acid	585-76-2					Intermediate of 6 Bromo- 3Hisobenzofuran- 1-one
12	Ortho Bromo Benzoic Acid	88-65-3					Intermediate of NitroImmidazole amine
13	Para Bromo Benzoic	586-76-5					Intermediate of

2 NIT							lazarotene
2. INI I	2 Nitro 4 Chloro Bonzoio						Intermediate of
1	Acid	96-99-1					Mebendazole
2	2 Chloro 5 Nitro Benzoic Acid	2516-96-3					Intermediate of Mesalamine
3	2 Chloro 3 Nitro Benzoic	3970-35-2					Intermediate of
	1 Chloro 3 5 Di Nitro		33 33	0	33 33		Llead in synthesis
4	Benzoic Acid	118-97-8	00.00	Ū	00.00		of
							anti-cancer drug
5	2 Chloro 3,5 Di Nitro	2497-91-8				200.0	Intermediate of
-	Benzoic Acid					399.9	Picric Acid
6	Acid	6280-88-2					ofQuinethazone
3. AM	INO BENZOIC ACID DERI	VATIVE					
1	Para Amino Benzoic	150-13-0					Intermediate of
0	Ortho Amino Benzoic	110.00.0					Intermediate of
2	Acid	118-92-3					Tolfenamic Acid
	Meta Amino Benzoic						Intermediate of
3	Acid	99-05-8					Chlortalidone&
	A Chlore 2 Amine	50150.04					Suramin sodium
4	4 Chioro 3 Amino Benzoic acid	2 2 29158-04-					Mebendazole
	2 Chloro 5 Amino		250	0	250	3000	Intermediate of
5	Benzoic Acid	89-54-3		_			Mesalamine
6	2 Chloro 3 Amino	108679-					Intermediate of
	Benzoic acid	71-6					Lenalidomide
7	3,4 DI AMINO Benzophenone	39070-63-					Mebendazole
-	2 Chloro 4 Amino	0.457 70.0					Intermediate of
8	Benzoic Acid	2457-76-3					Chloroprocaine
9	4 Chloro 2 Amino	89-77-0					Intermediate of
	Benzoic Acid						Quinethazone
4. BE	NZUYL CHLORIDE DERIV						Intermediate of
1	Denzoyi Chionae	98-88-4					Diphenhydramine
•							Hydrochloride
2	Para Chloro Benzoyl	122-01-0					Intermediate of
2	Chloride	122-01-0					Moclobemide
3	Ortho Chloro Benzoyl	609-65-4					Intermediate of
	Chloride Moto Chloro Bonzovi						Clonazepam
4	Chloride	618-46-2					Omeprazole
	Para Nitro Benzoyl		25	0	25	300	Intermediate of
5	Chloride	122-04-3					Procaineamide
							Hydrochloride
	Ortho Nitro Benzoyl						Intermediate of
6	Chloride	610-14-0					Pirenzepine
	Meta Nitro Renzovi						Intermediate of
7	Chloride	121-90-4					Ketoprofen
0	2,4 Di Chloro Benzoyl	80.75.9					Intermediate of
0	Chloride	03-10-0					Lonidamine

9	3,4 Di Chloro Benzoyl Chloride	3024-72-4					Intermediate of Sertraline
10	2,3 Di Chloro Benzoyl Chloride	2905-60-4					Intermediate of Lamotrigine
11	3 Nitro 4 Chloro Benzoyl Chloride	38818-50- 7					Intermediate of Mebendazole
12	2 Chloro 5 Nitro Benzoyl Chloride	25784-91- 2					Intermediate of Nitroxazepine
13	2 Chloro 3 Nitro Benzoyl	34128-16- 0					Intermediate of
14	2 Chloro 4 Nitro Benzoyl Chloride	7073-36-1					Intermediate of chloroprocaine
15	4 Chloro 2 Nitro Benzoyl Chloride	41995-04- 4					Intermediate of Lodipamide
16	Meta Bromo Benzoyl Chloride	1711-09-7					Intermediate of Quinoxaline Base Drug
17	Ortho Bromo Benzoyl Chloride	7154-66-7					Intermediate of BretyliumTosilate
18	Para Bromo Benzoyl Chloride	586-75-4					Intermediate of Tazarotene
5. SU	LFOMOYL BENZOIC ACID	DERIVATIVE					
1	4 ChloroSulfomoyl Benzoic Acid	1205-30-7					Intermediate of Clopamide
2	2 ChloroSulfomoylBenzoic Acid	97-04-1					Intermediate of EstradiolSulfamat e
3	3 ChloroSulfomoyl Benzoic Acid	4025-64-3					Used to manufacture API and Pigments
4	4 Nitro Sulfomoyl Benzoic Acid						Used to manufacture API and Pigments
5	2 Nitro Sulfomoyl Benzoic Acid						Used to manufacture API
6	3 Nitro Sulfomoyl Benzoic Acid		25	0	25	300	Used to manufacture API
7	2,4 Di ChloroSulfomoyl Benzoic Acid (Lasamide)	2736-23-4					Intermediate of Furosemide
8	3,4 Di ChloroSulfomoyl Benzoic Acid						Used to manufacture API and Pigments
9	2,3 Di ChloroSulfomoyl Benzoic Acid						Used to manufacture API and Pigments
10	3 Nitro 4 ChloroSulfomoyl Benzoic Acid	22892-96- 2					Intermediate of Bumetanide
11	2 Chloro 5 Nitro Sulfomoyl Benzoic Acid						Used to manufacture

							API and Pigments
12	2 Chloro 3 Nitro						Used to
12	Sullomoyi Benzoic Aciu						API and Pigments
	Acetyl Beta Phenyl Ethyl	35303-76-					Intermediate of
13	Amine (BPEA) Sulfonamido	5					Glibenclamide
6. ME	THOXY BENZOIC ACID DE	ERIVATIVE					
1	Para Methoxy Benzoic	100-09-4					Intermediate of
	Acid Ortho Methoxy Benzoic						Aliskiren Intermediate of
2	Acid	579-75-9					Amisulpride
3	Meta Methoxy Benzoic Acid	586-38-9					Intermediate of Zafirlukast
4	3 Nitro 4 Methoxy	89-41-8					Used to manufacture
	Benzoic Acid						API
5	2 Nitro 4 Methoxy	6280-89-3	12.5	0	12.5	150	manufacture
	Benzoic Acid						API and Pigments
6	4 Nitro 2 Methoxy	33234-36- 5					manufacture
	Benzoic Acid	5					API and Pigments
							Batrixaban
7							
'							
	5 Nitro 2 Methoxy Benzoic Acid						
7. CH	LORO TOLUENES						
1	Para Chloro Toluene	106-43-4					Intermediate of Mebendazole
2	Di Chloro Toluene	95-73-8	2.5	-2.5	0	0	Intermediate of Furosemide
3	Mix Di Chloro Toluene		•				Intermediate of
8. BE	NZO NITRILE DERIVATIVE	S					T drosennide
1	2 Chloro 5 Nitro Benzo	16588-02-					Intermediate of
	Nitrile 3 Nitro 4 ChloroBenzo	6					Intermediate of
2	Nitrile	939-80-0					Indapamide
3	2, 3 Di ChloroBenzo Nitrile	6574-97-6					Intermediate of Ticlatone
4	3, 4 Di ChloroBenzo Nitrile	6574-99-8					Intermediate of Sertraline
5	2, 4 Di ChloroBenzo Nitrile	6574-98-7	25	0	25	300	Intermediate of Glibenclamide
6	Meta Nitro Benzo Nitrile	619-24-9					Intermediate of
-	Para Nitro Benzo Nitrile	640 70 7					Intermediate of
/		019-72-7					ate
8	Meta ChloroBenzo Nitrile	766-84-7					Intermediate of Bruproprion
9	Ortho ChloroBenzo	873-32-5	1				Intermediate of Tri-

	Nitrile						n-butyline
10	Para ChloroBenzo Nitrile	623-03-0					Intermediate of
	2 Chloro 2 Nitro Bonzo	020 00 0					Pyrimethamine
	Nitrile	34662-24-					Glucocorticoids &
11		3					acibenzolar s
	O Oblass A Nites Davas	00400.00					methyl
12	2 Chioro 4 Nitro Benzo Nitrile	28163-00-					Rivanol
12	4 Chloro 2 Nitro Benzo	34662-32-					Intermediate of
13	Nitrile	3					Veterinary Drug
14	Meta BromoBenzo Nitrile	6952-59-6					GSK 3 Inhibitor
	Ortho BromoBenzo						Intermediate of
15	Nitrile	2042-37-7					NitroImmidazole
10	Ortho Nitro Benzo Nitrile						Intermediate of
16		612-24-8					Tolfenamic Acid
17	Para BromoBenzo Nitrile	623-00-7					Intermediate of
9. BE	NZAMIDE DERIVATIVE						Thazines
	2 Chloro 3 Nitro						Intermediate of
1	Benzamide	117054-					Glucocorticoids &
		76-9					methyl
2	2 Chloro 4 Nitro	3011-80-0					Intermediate of
	Benzamide	3011-09-0					Aklomide
3	2 Chioro 5 Nitro Benzamide	16588-15-					Mesalamine
4	2, 3 Di ChloroBenzamide	5980-24-5					Intermediate of
	2. 4 Di ChloroBenzamide						Intermediate of
5	_,	2447-79-2					Furosemide
	3, 4 Di ChloroBenzamide						Intermediate of
6		2670-38-4	25	0	25	300	Sertraline
	4 Chloro 2 Nitro		20	Ū	20	000	Intermediate of
1	Benzamide	3011-890					Veterinary Drug
8	4 Chloro 3 Nitro	16588-06-					Intermediate of
	Meta BromoBenzamide	22726-00-					Indapamide
9		7					GSK 3 Inhibitor
10	Meta ChloroBenzamide	618-48-4					Intermediate of
14	Meta Nitro Benzamide	645.00.0					Intermediate of
		040-09-0					Veterinary Drug
12	Ortho BromoBenzamide	4001-73-4					Intermediate of Veterinary Drug
13	Ortho ChloroBenzamide	609-66-5	1				Intermediate of
	Ortho Nitro Bonzomido						Trifluuron
14		610-15-1					Tolfenamic Acid

15	Para BromoBenzamide	698-67-9					Intermediate of DiminazineDiacet urate			
16	Para ChloroBenzamide	619-56-7					Intermediate of Pyrimethamine			
17	Para Nitro Benzamide	619-80-7					Intermediate of DiminazineDiacet urate			
	2 Amino Benzoic Sulfonamide						Intermediate of EstradiolSulfamat			
10		137-65-5	12.5	0	12.5		e			
						150				
11	Thio Salicylic Acid	147-93-3	12.5	-12.5	0	0	Intermediate of Thianaphene			
12	Aceturic Acid	543-24-8	2	0	2	24	Intermediate of D - Thyroxin			
	Maleic Acid						Intermediate			
13		110-16-7	13	-13	0					
						0				
	Total Existing		488.33	-28	460.33	5523.9 6				
	PROPOSED PRODUCTS									
14	BPEA Sulfonamide (n-2)	31431-39- 7	0	10	10	120	Manufacturing of Glibenclamide Sulfonamide &Glipizide Sulfonamide			
15	Glibenclamide Sulfonamide (n-1)	16673-34- 00				120	Manufacturing of Glibenclamide			
16	Glipizide Sulfonamide (n- 1)	33288-71- 0					Manufacturing of Glipizide			
17	PCBA Sulfonamide (n-1)	1205-30-7					Manufacturing of Indapamide or clopamide			
18	Indapamide (API)	26807-65- 8	0	15	15	180	Anti Hypertensive& Diuretic			
19	Clopamide (API)	636-54-4					Anti Hypertensive& Diuretic			
20	Para Nitro Benzoic Acid (n-2)	150-13-0					Manufacturing of Para Amino Benzoic Acid			
21	Para Amino Benzoic Acid (n-1)	62-23-7	0	100	100	1200	Manufacturing of Benzocain			
22	Benzocain (API)	94-09-7	1				Pain Reliever & Vitamin B			
23	2 Chloro 5 Nitro Benzoic Acid (n-2)	96-97-9	0	50	50	600	Manufacturing of 5 Nitro Salicylic			

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							Acid
24	5 Nitro Salicylic Acid (n- 1)	2516-96-3					Manufacturing of Mesalamine
25	Mesalamine (API)	89-57-6					Bowel Disorder
26	4 Chloro 3 Nitro Benzoic Acid (n-3)	39070-63- 8					Manufacturing of 4 Chloro 3 Nitro Benzophenone
27	4 Chloro 3 Nitro Benzophenone (n-2)	56107-02- 9	0	100	100	1200	Manufacturing of 3 4 Di Amino Benzophenone
28	3 4 Di Amino Benzophenone (n-1)	96-99-1					Manufacturing of Mebendazole
29	2,4 Di Chloro Benzoic Acid (n-2)	2736-23-4	0	100	100	1200	Manufacturing of Lasamide(2,4 Di Chloro Benzoic Acid 5 Sulfonamide)
30	Lasamide(2,4 Di Chloro Benzoic Acid 5 Sulfonamide) (n-1)	50-80-7					Manufacturing of Furosemide
	R&D		0	0.1	0.1	1.2	
	Pr	0	375.1 MT/M	375.1MT /M	4501.2		
	Existing + Pr	488.33 MT/M	Increase Quantity 347.1 MT/M	835.43 MT/M	10025. 16		

Brief Note of Product Profile:

- 1. No of Manufacturing Plants: 3no.s
- 2. Brief Note regarding number of Products to be manufactured considering plant capacity:

Specific End-use of each proposed products:

Sr.	Name of the	me of the CAS No.	Type/ Category of Product (API/ Intermediate)	In case of Intermediate stage of API		SaidAPIisused	
No	Product	(Product)		NameofAPlinwhi ch IntermediateUsed /End use of said Intermediate	CAS No. (API)		
1.	BENZOIC CID DERIVATIVES						
1	Para ChloroBenzoic Acid	74-11-3	Intermediate	Mebendazole	31431- 39-7	Anthelmintic or Anti Worm Medicine	

2	Ortho ChloroBenzoic Acid	118-91-2	Intermediate	Mefenamic Acid&	61-68-7 89-57-6	Anti Inflammatory To treat bowel disease
3	Meta ChloroBenzoic Acid	535-80-8	Intermediate	Bruproprion	34841- 39-9	For Treating Depressive Disorder&Quit Smoking
4	Para Nitro Benzoic Acid	62-23-7	Intermediate	Folic Acid& Benzocain	59-30-3 94-09-7	Folic Acid (Vitamin B) Deficiancy Pain Reliever
5	Ortho Nitro Benzoic Acid	552-16-9	Intermediate	Tolfenamic Acid	13710- 19-5	For treatment of Migraine
6	Meta Nitro Benzoic Acid	121-92-6	Intermediate	Ertapenem	153832- 38-3	Antibiotic
7	2,4DiChloro BenzoicAcid	50-80-0	Intermediate	Furosemide	54-31-9	Diuretic
8	3,4DiChloro BenzoicAcid	51-44-5	Intermediate	Sertraline	79617- 96-2	Anti Depressant
9	2,3DiChloro BenzoicAcid	50-45-3	Intermediate	Lamotrigine	84057- 84-1	Anti Epileptic
10	Sodium Arabonate	30418- 45-2	Intermediate	Xylenol	1300- 71-6	Sugar Free
11	Meta Bromo Benzoic Acid	585-76-2	Intermediate	6 Bromo-3H- isobenzofuran-1- one	19477- 73-7	Anti Palatal Activity
12	Ortho Bromo Benzoic Acid	88-65-3	Intermediate	NitroImmidazole amine	527-73- 1	Veterniary Drug
13	Para Bromo Benzoic Acid	586-76-5	Intermediate	Tazarotene	118392- 40-3	Anti acne& Psoriasis
2	NITRO BENZOIC AC	D DERIVAT	IVES			
1	3 Nitro 4 Chloro Benzoic Acid	96-99-1	Intermediate	Mebendazole	31431- 39-7	Anthelmintic or Anti Worm Medicine
2	2 Chloro 5 Nitro Benzoic Acid	2516-96- 3	Intermediate	Mesalamine	89-57-6	To treat bowel disease
3	2 Chloro 3 Nitro Benzoic acid	3970-35- 2	Intermediate	Tucoresol	84290- 27-7	InvenstigationalHIV Drug
4	4 Chloro 3,5 Di Nitro Benzoic Acid	118-97-8	Intermediate	Used in synthesis of anti- cancerdrug		Used in synthesis of anti- cancer drug

5	2 Chloro 3,5 Di Nitro Benzoic Acid	2497-91- 8	Intermediate	Picric Acid	88-89-1	Antispectic/Burn Treatment
6	4 Chloro 2 Nitro Benzoic Acid	6280-88- 2	Intermediate	Quinethazone	73-49-4	Diuretic
3	AMINO BENZOIC AC	ID DERIVAT	IVES	-		
1	Para Amino Benzoic Acid	150-13-0	Intermediate	Benzocaine	94-09-7	Pain reliever
2	OrthoAmino BenzoicAcid	118-92-3	Intermediate	Tolfenamic Acid	13710- 19-5	For treatment of Migrain
3	MetaAmino BenzoicAcid	99-05-8	Intermediate	Chlortalidone& Suramin sodium	77-36-1	Hyper Tension
4	4 Chloro 3 Amino Benzoic acid	2840-28- 0	Intermediate	Mebendazole	31431- 39-7	Anthelmintic or Anti Worm Medicine
5	2 Chloro 5 Amino Benzoic Acid	89-54-3	Intermediate	Mesalamine	89-57-6	To treat bowel disease
6	2 Chloro 3 Amino Benzoic acid	108679- 71-6	Intermediate	Lenalidomide	191732- 72-6	Oncology
7	3,4 Di Amino Benzophenone	39070- 63-8	Intermediate	Mebendazole	31431- 39-7	Anthelmintic or Anti Worm Medicine
8	2 Chloro 4 Amino Benzoic Acid	2457-76- 3	Intermediate	Chloroprocaine	133-16- 4	Anesthetic(Local)
9	4 Chloro 2 Amino Benzoic Acid	89-77-0	Intermediate	Quinethazone	73-49-4	Diuretic
4	BENZOYL CHLORIDE	DERIVATIVE	S			
1	Benzoyl Chloride	98-88-4	Intermediate	Diphenhydramin e Hydrochloride	58-73-1	Anti allergic
2	Para Chloro Benzoyl Chloride	122-01-0	Intermediate	Moclobemide	713 20-77-9	Anti Depressant
3	Ortho ChloroBenzoyl Chloride	609-65-4	Intermediate	Clonazepam	378-44- 9	Tranquiliser

4	Meta Chloro Benzoyl Chloride	618-46-2	Intermediate	Omeprazole	73590- 58-6	Antacid
5	Para Nitro Benzoyl Chloride	122-04-3	Intermediate	ProcaineamideHy drochloride	614-39- 1	Antiarrhythmic
6	Ortho Nitro Benzoyl Chloride	610-14-0	Intermediate	Pirenzepine&Glep henine	28797- 61-7& 3820- 67-5	Antiulcerative& Anti inflamatory
7	Meta Nitro Benzoyl Chloride	121-90-4	Intermediate	Ketoprofen	22071- 15-4	NonsteroidalAntiinflamator y Drug
8	2,4 DiChloro Benzoyl Chloride	89-75-8	Intermediate	Lonidamine	50264- 69-2	Anti cancer
9	3,4 DiChloro Benzoyl Chloride	3024-72- 4	Intermediate	Sertraline	79617- 96-2	Anti Depressant
10	2,3 Di ChloroBenzoyl Chloride	2905-60- 4	Intermediate	Lamotrigine	84057- 84-1	Anti Epileptic
11	3Nitro4 ChloroBenzoyl Chloride	38818- 50-7	Intermediate	Mebendazole	31431- 39-7	Anthelmintic or Anti Worm Medicine
12	2 Chloro 5 Nitro Benzoyl Chloride	25784- 91-2	Intermediate	Nitroxazepine	16398- 39-3	Anti Depressant
13	2 Chloro 3 Nitro Benzoyl	34128- 16-0	Intermediate	Dabigatran	211915- 06-9	Anti Coagulant
14	Chloride 2 Chloro 4 Nitro Benzoyl Chloride	7073-36- 1	Intermediate	chloroprocaine	133-16- 4	Anesthetic(Local)
15	4 Chloro 2 Nitro Benzoyl Chloride	41995- 04-4	Intermediate	Lodipamide	3521-84-4	Liver Treatment
16	Meta BromoBenzoyl Chloride	1711-09- 7	Intermediate	QuinoxalineBase Drug	290-37-9	Anti Cancer
17	Ortho BromoBenzoyl Chloride	7154-66- 7	Intermediate	BretyliumTosilat e	59-41- 6	AntiarrythemicAgent
18	Para Bromo Benzoyl Chloride	586-75-4	Intermediate	Tazarotene	118392- 40-3	Anti Acne, Psoriasis
5	SULFAMOYL BENZO	IC ACID DE	RIVATIVES			

1	4Chloro5 Sulfomoyl Benzoic Acid	1205-30- 7	Intermediate	Clopamide	636-54- 4	Diuretic
2	2 Chloro 5 SulfomoylBenzoic Acid	97-04-1	Intermediate		172377- 52-5	steroid sulfatase (STS) inhibitor for the treatment of endometriosis. Also used in Pigments
3	3Chloro4 Sulfomoyl Benzoic Acid	34263- 53-1	Intermediate			Diuretic and pigments
4	4 Nitro 2 SulfomoylBenzoic Acid	89795- 77-7	Intermediate			Anti Inflamatoryandalso used in pigments
5	2 Nitro 4 Sulfomoyl Benzoic Acid	29092- 31-7	Intermediate			Analgesic
6	3 Nitro 5 Sulfomoyl Benzoic Acid	860562- 97-6	Intermediate			Diuretic
7	2,4 Di Chloro5 Sulfomoyl Benzoic Acid	2736-23- 4	Intermediate		54-31-9	Diuretic
	(Lasamide)					
8	3,4 Di Chloro5 Sulfomoyl Benzoic Acid	62971- 57-7	Intermediate	Used to manufacture API and Pigments		Treatment of ulcerand pigments
9	2,3 Di Chloro5 Sulfomoyl Benzoic Acid	869965- 83-3	Intermediate	Used to manufacture API and Pigments		Treatment of cancer and in pigments
10	3 Nitro 4 Chloro 5 SulfomoylBenzoic Acid	22892- 96-2	Intermediate	Bumetanide	28395- 03-1	Swelling and high blood pressure
11	2 Chloro 5 Nitro 3 SulfomoylBenzoic Acid		Intermediate	Used to manufacture API and Pigments		Pain reliefand pigmets
12	2 Chloro 3 Nitro 5 SulfomoylBenzoic Acid		Intermediate	Used to manufacture API and Pigments		Diuretic and pigments

13	Acetyl Beta Phenyl Ethyl Amine(BPEA) Sulfonamide	35303- 76-5	Intermediate	Glibenclamide	10238- 21-8	Anti Diabetic
6						
0			VATIVES			
1	Para Methoxy Benzoic Acid	100-09-4	Intermediate	Aliskiren	173334- 58-2	Hyper Tension
2	Ortho Methoxy Benzoic Acid	579-75-9	Intermediate	Amisulpride	53583- 79-2	Antiemetic and antipsychotic
3	Meta Methoxy Benzoic Acid	586-38-9	Intermediate	Zafirlukast	107753- 78-6	Asthma Treatment
4	3 Nitro4 Methoxy Benzoic Acid	89-41-8	Intermediate	Used to manufacture API		AntiTumorAgent
5	2 Nitro3 Methoxy Benzoic Acid	40751- 88-0	Intermediate	Used to manufacture API and Pigments		Used to manufacture API and Pigments
6	4 Nitro2 Methoxy Benzoic Acid	2597-56- 0	Intermediate	Used to manufacture API and Pigments		Used to manufacture API and Pigments
7	5 Nitro2 Methoxy Benzoic Acid	40751- 89-1	Intermediate	Batrixaban	330942- 05-7	Anticoagulant and for treating Thrombosis
7	CHLORO TOLUENE D	ERIVATIVES	;			
1	Mono ChloroToluene	106-43- 4/ 95-49- 8/ 95-49-8	Intermediate	Mebendazole	31431- 39-7	Anthelmintic or Anti Worm Medicine
2	Di Chloro Toluene	95-73-8/ 95-75-0/ 32768- 54-0	Intermediate	Furosemide	54-31-9	Diuretic
3	Mix Di ChloroToluene	95-73-8/ 95-75-0/ 32768- 54-0	Intermediate	Furosemide	54-31-9	Diuretic
8	BENZO NITRILE DER	RIVATIVES				
1	2 Chloro 5 Nitro Benzo Nitrile	16588- 02-6	Intermediate	Mesalamine	89-57-6	To treat bowel disease

2	3 Nitro 4 ChloroBenzo Nitrile	939-80-0	Intermediate	Indapamide	26807- 65-8	Diuretic
3	2, 3 Di Chloro Benzo Nitrile	6574-97- 6	Intermediate	Ticlatone	70-10-0	Antifungal
4	3, 4 Di Chloro Benzo Nitrile	6574-99- 8	Intermediate	Sertraline	79617- 96-2	Anti Depressant
5	2, 4 Di Chloro Benzo Nitrile	6574-98- 7	Intermediate	Glibenclamide	10238- 21-8	ForDiabetestype II
6	Meta Nitro Benzo Nitrile	619-24-9	Intermediate	Ertapenem	153832- 38-3	Antibiotic
7	Para Nitro Benzo Nitrile	619-72-7	Intermediate	Diminazineacetu rate	908-54- 3	Antiprotozol Drug
8	Meta ChloroBenzo Nitrile	766-84-7	Intermediate	Bruproprion	34841- 39-9	For Treating Depressive Disorder&Quit Smoking
9	OrthoChloro BenzoNitrile	873-32-5	Intermediate	Tri-n-butyline Chloride	1461- 22-9	For endocrine disruptions
10	Para Chloro Benzo Nitrile	623-03-0	Intermediate	Pyrimethamine	58-14-0	Antimalarial
11	2 Chloro 3 Nitro BenzoNitrile	34662- 24-3	Intermediate	Glucocorticoid s &acibenzolar s methyl	135158- 54-2	Antiinflammatory correct liver damage. Alsousedasfungicide
12	2 Chloro 4 Nitro Benzo Nitrile	28163- 00-0	Intermediate	Rivanol	1837- 57-6	Antiseptic
13	4 Chloro 2 Nitro Benzo Nitrile	34662- 32-3	Intermediate	Veterinary Drug		Veterinary Drug
14	MetaBromo BenzoNitrile	6952-59- 6	Intermediate	GSK 3 Inhibitor	667463- 62-9	Central Nervous System agent
15	OrthoBromo BenzoNitrile	2042-37- 7	Intermediate	Nitrolmmidazole amine	527-73- 1	Veterniary Drug
16	Ortho Nitro Benzo Nitrile	612-24-8	Intermediate	Tolfenamic Acid	13710- 19-5	For treatment of Migraine
17	Para Bromo Benzo Nitrile	623-00-7	Intermediate	Triazines	290-87- 9	Pain Releiver
9	BENZAMIDE DERIVA	TIVES				
1	2 Chloro 3 Nitro Benzamide	117054- 76-9	Intermediate	Glucocorticoid s &acibenzolar s methyl	135158- 54-2	Antiinflammatorycorrect liver damage. Also usedasfungicide
	2 Chloro 4		Intermediate			Antiprotozol
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2	Nitro	3011-89-		Aklomide	3011-	Antiparasitic&Pigments
	Benzamide	0			89-0	, iniparaonioar ignorito
	2 Chloro 5		Intermediate			
3	Nitro	16588-		Mesalamine	89-57-6	To treat bowel
	Benzamide	15-1				disease
	2 3 Di Chloro	5980-24-	Intermediate		84057-	Anti Epileptic
4	Benzamide	5	internetiate	Lamotrigine	84-1	
	2 4 Di Chloro	2447-79-	Intermediate		• • •	
5	Benzamide	2	internediate	Furosemide	54-31-9	Diuretic
	3 4 Di Chloro	- 2670-38-	Intermediate		79617-	
6	Benzamide	4	internediate	Sertraline	96-2	Anti Depressant
	4Chloro2 Nitro		Intermediate	Veterinary Drug		Veterinary Drug
7	Renzamide	41994-	Internetiate	Veterinary Drug		Veterinary Drug
	Donzamido	91-6				
	4 Chloro 3		Intermediate			
8	Nitro	16588-	internediate	Indapamide	26807-	Diuretic
Ū	Benzamide	06-0			65-8	
	Meta Bromo	22726-	Intermediate		667463-	Central Nervous
9	Benzamide	00-7	internediate	GSK 3 Inhibitor	62-9	System agent
	Meta Chloro		Intermediate	Bruproprion	34841-	For Treating
10	Benzamide	618-48-4	internediate	Brapropriori	39-9	Depressive Disorder &
	Donzamido				000	Quit
						Smoking
11	MetaNitro	645-00-0	Intermediate	Votorinary Drug		
	Benzamide	045-09-0		veterinary Drug		
12	Ortho Bromo	4001-73-	Intermediate	NitroImmidazole	527-73-	Veterniary Drug
12	Benzamide	4		amine	1	
13	Ortho Chloro	609-66-5	Intermediate	Trifluuron	64628-	Bacteria Growth
	Benzamide				44-0	Regulator
14	Ortho Nitro	610-15-1	Intermediate	Tolfenamic Acid	13710-	For treatment of
	Benzamide				19-5	Migraine
15	Para Bromo	698-67-9	Intermediate	DiminazineDiacet	908-54-	Veterniary Drug
	Benzamide			urate	3	
16	Para Chloro	610-56-7	Intermediate	Pyrimothamino	58-14-0	Antimalarial
10	Benzamide	019-30-7		r ynneurannie	50-14-0	Antimalanai
17	Para Nitro	619-80-7	Intermediate	DiminazineDiacet	908-54-	Veterniary Drug
	Benzamide	010 00 7		urate	3	Vetermary Drug
			I			
	2 Amino Benzoic		Intermediate			steroid sulfatase (STS)
	Sulfonamide			Estradiol		inhibitor for the treatment
10		137-65-5		Sullamate	172377-	of endometriosis.
		107-00-0			52-5	Also used in
						Pigments
11	Thio Salicylic	147-93-3	Intermediate	Thiananhene	95-15-8	Fungicide
	Acid	1-17-00-0			00 10-0	
12	Aceturic Acid	543-24-8	Intermediate	D -Thyroxin	51-49-0	Thyroid
						Ireatment

13	Maleic Aci	d	110-16-7	Inte	Intermediate Pyridoindo		lolone	olone 245-08- 9		Anti-cancer
PR	OPOSED PR	ODUCT	S	1						
S r.	Name of CAS y o the No. Brod		Type/ Categor y of Broduc	Stag e (n- 1, n-	In cas	e of Intern stage of Al	nediate Pl		for	SaidAPIisused /EndUseofsaidAPI
N O	Product	(Produc t)	t (API/ Intermedia te)	2, n-3)	NameotA Intermed End use Interm	CAS N (API	lo.)			
14	BPEA Sulfonamid e	31431- 39-7	Intermediat es	n-2	Glibeno Sulfor or Gl Sulfor	clamide amide ipizide amide	16673 34-00 33288 71-0	3- or 8-)	Antidiab	etic
15	Glibenclami de Sulfonamid e	16673 -34-00	ΑΡΙ	n-1					Antidiab	petic
16	Glipizide Sulfonamid e	33288 -71-0	API	n-1					Antidiabetic	
17	PCBA Sulfonamide	1205- 30-7	Intermediat es	n-1	Indapami Clopamic	de Or le	26807 65-8 0 636-54	7-)r -4	Anti HyperTensive& Diuretic	
18	Indapamide	26807 -65-8	API	n					Anti Hyp	perTensive& Diuretic
19	Clopamide	636- 54-4	API	n					Anti Hyp	perTensive& Diuretic
20	Para Nitro Benzoic Acid	62-23- 7	Intermediate s	n-2	Benzocai	n	94-09-	7 F	Pain Rele	eiver& Vitamin B
21	Para Amino Benzoic Acid	150- 13-0	Intermediate s	n-1	Benzocai	n	94-09-	7 ^F	Pain Rele	eiver& Vitamin B
22	Benzocain	94-09- 7	API	n	-	-			Pain Re	leiver& Vitamin B
23	2 Chloro 5 Nitro Benzoic Acid	2516- 96-3	Intermediate s	n-2	Mesalamir	ne	89-57-6	i E	Bowel Di	sorder
24	5 Nitro Salicylic Acid	96-97- 9	Intermediate s	n-1	Mesalamir	ne	89-57-6	E	Bowel Di	sorder

25	Mesalamine	89-57- 6	API	n			Bowel Disorder
26	4 Chloro 3 Nitro Benzoic Acid	96-99- 1	Intermediate s	n-3	Mebendazole	31431-39- 7	Anti-Worm
27	4 Chloro 3 Nitro Benzopheno ne	56107 -02-9	Intermediate s	n-2	Mebendazole	31431-39- 7	Anti-Worm
28	3 4 Di Amino Benzopheno ne	39070 -63-8	Intermediate s	n-1	Mebendazole	31431- 39-7	Anti-Worm
29	2,4 Di Chloro Benzoic Acid	50-80- 7	Intermediate s	n-2	Furosemide	54-31-9	Diuretic
30	Lasamide(2, 4 Di Chloro Benzoic Acid 5 Sulfonamide)	2736- 23-4	Intermediat es	n-1	Furosemide	54-31-9	Diuretic

 The project falls under Category B2 of project activity 5(f) as per the schedule of EIA Notification 2006 and amendment dated 27th March, 2020.

- PP submitted an undertaking ensuring proposed product profile is in line with MoEF&CC's Notification vide S.O. 1223 (E) dated 27/03/2020 in respect of Active Pharmaceutical Ingredients (API) as category B2 projects. Undertaking as proposal of said product are eligible to consider under B2 category as per the notification of MoEF&CC dated 27.03.2020
- The proposal was considered in the SEAC video conference meeting dated 19.05.2021.
- During the meeting dated 19.05.2021, the project was appraised based on the information furnished in Form

 1, Pre-Feasibility Report, Environment Management Plan and details submitted by e-mail.
- Project proponent (PP) and their Technical Expert from M/s Jyoti om Chemical Research Centre Pvt. Ltd remain present during video conference meeting.
- This is an existing unit involved in manufacturing of various benzoic acid derivatives for which EC is not applicable as unit was established before year 2006 and existing CCA valid up to dated: 15.10.2022. Self-Certified compliance report of existing CCA is submitted.
- Committee noted that "there is no litigation pending before any court of Law and no public complaints against the Project'. There is closure direction issued on dated: 14.08.2020 for which revocation was issued on 10.09.2020 for a period of three months.

- Now, unit has proposed for expansion for manufacturing of synthetic organic chemicals [API and API Intermediates] at GIDC Ankleshwar. Total plot area is 6144Sq. m.
- Committee deliberated on product profile with specific end-use of each proposed products. PP proposed for expansion of various benzoic acid derivatives considering it as API Intermediates which is not acceptable.
 Upon asking regarding detailed manufacturing process and its specific end-use of various benzoic acid derivatives, PP could not reply satisfactorily.
- Committee noted the following:
 - ✓ Site Plan/ layout with fire plan & floor plans and provision of separate entry & exits, 6 m & 8 m wide peripheral road, OHC, production areas, raw material & finished goods storage area, ETP area, utility area, solvent storage area, 20.17% greenbelt within premises, etc.
 - ✓ Natural gas is proposed as fuel in boilers and TFHs.
 - ✓ Two stage scrubbing system is proposed for control of process gas emission.
 - ✓ Scrubbing liquor will be treated in ETP.
 - PP submitted hazardous waste matrix mentioning source of generation, quantity and Mode of disposal and committed to comply the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
 - ✓ Generated industrial effluent from existing project will be treated in primary ETP followed by settler and sent to CETP-ETIL.
 - ✓ Generated industrial effluent from proposed project will be treated in primary ETP and sent to CMEE-BEIL.
 - ✓ Domestic effluent will be treated in STP and reused for gardening/ plantation.
 - ✓ Fire load calculation mentioning fire water storage (Cap: 500 KL), 14 Nos of foam type extinguishers (Cap: 9 Litres) and 6 Nos of foam trolley (Cap: 45 Litres).
- Committee deliberated on Product profile, Layout plan, Storage details, Process safety, Fire safety, water balance & waste water management, Flue gas and process gas emission & Air Pollution Control System, Hazardous waste matrix, EMP, CER, Green belt, etc.
- Committee insisted to mention reuse of boiler condensate in water balance.

After detailed discussion, Committee unanimously decided to consider the proposal in the upcoming SEAC meeting only after satisfactory submission of the following:

- Justification regarding various benzoic acid derivatives in line with MoEF&CC's Notification dated 27/03/2020. Also submit detailed manufacturing process of relative API and benzoic acid derivatives which is considered as API Intermediates. Also submit specific end-use of each benzoic acid derivatives in API manufacturing.
- Submit revised product profile and proposal with submission of revised PFR, Form-1, EMP and CER in line with MoEF&CC's Notification dated 27/03/2020 and subsequent change in Water, Air and Hazardous waste Management.
- 3. Revised water balance mentioning reuse of boiler condensate.

- PP submitted reply of above query generated on SEAC VC meeting dated 19/05/2021 through e-mail.
- This proposal is reconsidered in SEAC meeting dated 05.08.2021. PP along with their technical expert/consultant, M/s. Jyoti Om Chemical Research Centre Pvt. Ltd remains present in the meeting and made presentation before Committee.
- PP submitted revised product profile as above and revised salient features of water, air and Hazardous waste management are as under,

Sr. no.	Particula	Particulars Details								
A-1	Total co	st of Prop	osed	Project				I		
	(Rs. in C	(Rs. in Crores):								
	Exi		xistin	sting Proposed To		Total	ıtal			
		2	1.060	Crores	5.96Cr	ores	27.020	Crores		
	Break-u	p of propos	ed pr	oject Cos	t:					
		Details		Existing	J	Propose	d	Total		
				(Rs. In C	Crores)	(Rs. In		(Rs. In		
						Crores)		Crores)		
		Land Building		2.01		0.00		2.01		
				4.29 12.78 o 1.98		2.00 2.60 1.36		6.29 15.38 3.34		
	Machinery Miscellane		ry							
			neo							
		us								
A-2	Details	Details of Environmental Management Plan (EMP)						As belo	w:	
	1									
Sr. No.	Pollution Meas	n Control sures		E	quipme	nt	Ap e Co	proximat Capital st (Rs. In Lac.)	Appr e Ree Cos An (Rs.	oximat curring st Per num In Lac)
1	Air Pollutic	on Control	Ac	id & Alkal	li Scrubb	er		30		10
2	Water Control	Pollutior	ⁿ Pr	imary ETP & send to CMEE			106	1	300	
3	Environment 3 Monitoring and Management			Auditing				0		5
4	4 Solid Waste Management			VSA, Me d Co proc aste & Dis	embershi cessing o sposal	nbership Of TSDF essing of Hazardous 15 posal			1	00
5	Safety Ed First Aid K	quipment 8 it	& Fir Sn	re Exting noke dete	guisher, ctor	Aid k	Kit,	100		10

	Т	2.98	14.735	
9	CER	Surrounding 10 KM villages	5	1
8	Green belt development	Development Green belt area and its maintenance	2	0.5
7	ОНС	Bed, First Aid Kit, Periodical medical Check-up of employees Etc.	5	1
6	System	Chlorination & Distillation	35	10

Cost of Project in Crores per Annum:	27.02
EMP Capital Cost in Crores per Annum and	2.98&11.02%
Percentage:	
EMP Recurring Cost in Crores per Annum	14.735&54.5%
and Percentage:	

A-3

Details of CER as per OM dated 01/05/2018 (In case of project falls under CPA/SPA, CER fund allocation to be at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental Clearance as per the mechanism published vide MoEF&CC's OM vide 31.10.2019.)

% as per the OM	Rs. in Crores
1%	0.06

	BU	DGETARY ALLOCATION	FOR CER ACTIVI	TIES	
The un	it has planned to spend 1% of	f the total cost of the project	over a period of five y	ears towards CER activity	у.
So, as p	per the project cost Rs. 5 Lak	hs used in the CER activitie	3. Budgetary allocatio	n is given in below table.	
Sr. No.	A	Activity	(Capital C Y1	ost) Recurring 4 Yes	Cost for ars
1	Provide Rain Water Harve at Uchchali village	esting facility in primary scho	ool 5	0.25 X 4 =	1 Lacs
			5	1 Lac	cs
3	Land / Plot ow	nership details:			
		-			
B-1	Plot area				

		6144	Sq. m.	0	Sq. m.	61	44 Sq. m.		
B-2	Brief note or	Area adeq	uacy in lii	ne to p	roposed pro	ject a	ctivities:		
	Brief note or	n proposed a	ctivities:						
	 Total Exist unit v Plant The v Prop Total We would be also we have a set of the set of the	plot area of ing production vill develop (a 1 is having unit is having osed ETP are utility area is may further is acility locate use this facil is premises, unit is having e unit will sto raw materia	the unit is on building G+4 Facili 328.35 So total 2 N rea is 150 s 158.60 inform you d at Plot I lity to store the unit v ng 150 Sq or API pi I storage a	s 6144 g is hav ity. q mete los. of Sq.met Sq.met vill dev meter roducts area is	Sq.mt. ving G+2 Fa r and Plant 2 manufacturi eter. o store raw r 7 + 308 to 3 aw materils. lop 55.00 sc are for finis 65.00 Sq.m	acility 2 is ha ing fa mater 11/10 g mete hed g hed g	& after propo aving 499.87 acilities. ial , the unit in Ankleshw er solvent sto ood storage	osed expansion 7 Sq.mt. is having also var. The unit wil orage facility. . In F.G.Area -	
B-3	Green belt a	area							
			Existi	ng	Propose	d	Total		
			(Sq. m	eter)	(Sq. meter)		(Sq. meter	r)	
		Area in	1239	.23	3 2500		3739.23		
		Sq. meter							
		% of total	20.1	40.69		60.86			
		area							
-	· · - ·								
C	Employmen	it generatio	n 				-		
		EXI	sting	Pro	oposed		lotal		
				62			160		
			,0		02		100		
D	WATER								
D-1	Source of W	Vater Suppl	v						
	(GIDC, Bore	well, Surfac	- ce water, ⁻	Fanker	supply etc	.)			
	GIDC		,			,			
	Status of per	rmission fror	n the con	cern au	ithority.				
	> Unit	will apply.			~				
	 Status of permission from the concern authority. Unit will apply. 								
م م	Weter core	umption ///	ח)						

Sr. No.	Particula	ITS Existin Quantit as per CCA Quantity A- 9382 KLD	g Existin y Increas /Decrea KLD y –	ig Propos se Increa ase Decrea KLD	sed Tot se/Exp ase KLI	al after bansion D	Remarks	
1.	Domest	ic 5.05	0	4.9	95	10	Unit will use 10 KLD Fresh Water for domestic purpose.	
2.	Gardenir	ng 0	0	5		5	Recycle	
3.	Industria	al					1	
	Process	s 67.3	-0.3	0 57	7	124	Fresh	
	washing	g 5	0	5		10	Recycle	
	Boiler	12	0	12	2	24	Fresh	
	Cooling	j 10	0	10)	20	Fresh	
	Scrubbin	ig	0	3	,	3	Fresh	
	Industria	94.3	-0.3	0 87	7	181	171 Fresh + 10	
	Total						Recycle	
	Grand Total (1+2+3)	99.35	-0.3	0 96.'	95	196	181 Fresh + 15 Recycle	
D-3	Wast	e water gene	ration (KLD))			1	
Sr. No.	Particular s	Existing Quantity as per CCA Quantity – A - 93828 KLD	Existing Waste Water Generatio n KLD Increase/ Decrease	Proposed Waste water Generation KLD Increase/ Decrease	Total Was Water Generatio after expansio KLD	ste i on on	Remarks	
1.	Domestic	5	0.0	5	10	5 KL gard	D Reuse in lening + 5 KLD	
2.			Indu	Istrial	1	Cen		
	Process	65.8	-0.50	62.7	128	65.3 ETP Subj CME	KLD Send to + 62.7 KLD jected to	
	Washing	5	0.0	5	10	Subj	jected to	

	Cooling	5	C	0.0	5	10	Reuse	in washing.
	Scrubber	0	C).0	4.5	4.5	Subject	ted to ETP
	Total Industrial	81.8	-0	.50	83.6	164.9		
	TOTAL (Domestic + Industrial)	86.8	-0	.50	88.6	174.9		
Brief	Note on wo	orst case sce	nario	for was	ste water ge	neration(Q	ualitative ar	nd Quantitativ
Sr. No.	Name of Product			Produ Capad	iction city /Month	МТ/МТ	MT/M	MT/Day
1.	Glibencla	mide Sulfonar	nide	10		12	120	4
2.	Indapami	de or Clopami	de	15		7.0	105	3.50
3.	Benzocair	ne		100		5.2	520	17.33
4.	Meselami	ne		50		12.45	624.78	20.82
5.	3 chlorobon	Nitro	4	100		2.3232	232.32	7.7440
	6. 2,4 di chloro benzoic acid			100			280.0	0.2
6.	2,4 di chić	oro benzoic ac	JU	100		2.8	200.0	9.3
6. Brief gene	justificatio	on in case of high conce	of no	proce	TOTAL ss effluent lent generat	2.8 40.77 generation ion from pl	1882.1 or no incorrections	9.3 62.7 dustrial efflu
6. Brief gene is ap > D-4	justification ration or no plicable).	on in case of Disposal &	of no ntratio	proce on efflu	TOTAL ss effluent lent generat	2.8 40.77 generation ion from pr	1882.1 n or no incorrections roposed pro	9.3 62.7 dustrial efflu oject (Whiche
6. Brief gene is ap D-4 Exist	justification ration or no plicable). Not Applic Mode ing and Pro	on in case of high conce	of no ntratio	proce	TOTAL ss effluent lent generat	2.8 40.77 generation ion from pr	1882.1 n or no incorrections roposed pro	9.3 62.7 dustrial efflu
6. Brief gene is ap ▶ D-4 Exist	justification ration or no plicable). Not Applic Mode ing and Pro	on in case of high conce cable of Disposal & oposed	of no ntratio	proce on efflu I meetir	TOTAL ss effluent lent generat	2.8 40.77 generation ion from pr	1882.1 n or no incorrections roposed pro	9.3 62.7 dustrial efflu
6. Brief gene is ap ▶ D-4 Exist	justification ration or no plicable). Not Applic Mode ing and Pro pomestic: ndustrial:	on in case of high conce cable of Disposal & oposed Send to the S Existing load	of no ntratio & Fina & Fina	proce on efflu I meetir ETP nt send	TOTAL ss effluent lent generat	2.8 40.77 generation ion from pr sting and P	1882.1 n or no incorrections roposed pro- roposed)	9.3 62.7 dustrial efflu oject (Whiche
6. Brief gene is ap D-4 Exist	justification ration or no plicable). Not Applic Mode ing and Pro pomestic: ndustrial:	on in case of high conce cable e of Disposal & oposed Send to the S Existing load the CMEE	of no ntration & Fina STP& I efflue	proce on efflu I meetir ETP nt send	TOTAL ss effluent lent generat	2.8 40.77 generation ion from pr sting and P	1882.1 n or no incorrections roposed pro- roposed)	9.3 62.7 dustrial efflu oject (Whiche
6. Brief gene is ap D-4 Exist Ir Clear	justification ration or no plicable). Not Applic Mode ing and Pro pomestic: ndustrial:	on in case of high conce cable e of Disposal & oposed Send to the S Existing load the CMEE bout final disp	of no ntration & Fina &	proce on efflu I meetir ETP nt send	TOTAL ss effluent lent generat	2.8 40.77 generation ion from pr sting and P	1882.1 n or no incorrections roposed pro- roposed)	9.3 62.7 dustrial efflu oject (Whiche
6. Brief gene is ap D-4 Exist Exist Clear Clear CETF	justification ration or no plicable). Not Applic Mode ing and Pro bomestic: ndustrial:	on in case of high conce by high conce by high conce by book of Disposal & by book of Di	of no ntratio & Fina & Fina	proce on efflu I meetir ETP nt send	TOTAL ss effluent lent generat	2.8 40.77 generation ion from pr sting and P	1882.1 n or no incorrections roposed pro- roposed)	9.3 62.7 dustrial efflu oject (Whiche
6. Brief gene is ap D-4 Exist Exist Ir Clear CETF D-5 For F	justification ration or no plicable). Not Applic Mode ing and Pro oomestic: ndustrial: ly mention a p of M/s. ET Treat	on in case of high conce cable of Disposal & oposed Send to the S Existing load the CMEE about final disp L & CMEE of cment facilities	of no ntration & Fina & Fina	proce on efflu I meetir ETP nt send BEIL	TOTAL ss effluent lent generat	2.8 40.77 generation ion from pr sting and P	1882.1 n or no incorrections roposed pro- roposed)	9.3 62.7 dustrial efflu oject (Whiche
6. Brief gene is ap D-4 Exist Exist Clear Clear CETF D-5 For I Capa	justification ration or no plicable). Not Applic Mode ing and Pro oomestic: ndustrial: ly mention a p of M/s. ET Treat Domestic wa acity of STP:	on in case of high conce cable of Disposal & oposed Send to the S Existing load the CMEE about final disp L & CMEE of cment facilities aste water: 5 KLD	of no ntratio & Fina & Fina efflue posal M/s. E	proce on efflu I meetir ETP nt send BEIL	TOTAL ss effluent lent generat	2.8 40.77 generation ion from presting and P	1882.1 n or no incorrections roposed pro- roposed)	9.3 62.7 dustrial efflu oject (Whiche
6. Brief gene is ap D-4 Exist Exist Clear Clear Clear CETF D-5 For I	justification ration or no plicable). Not Applic Mode ing and Pro omestic: ndustrial: ly mention a p of M/s. ET omestic wa city of STP: ndustrial wa	on in case of b high conce cable e of Disposal & pposed Send to the S Existing load the CMEE about final disp L & CMEE of cment facilities aste water: 5 KLD aste water: T	of no ntratio	proce on efflu I meetir ETP nt send BEIL ent facil	TOTAL ss effluent lent generat ng point (Exis to the M/s. E	2.8 40.77 generation ion from pr sting and P TL & Propo	1882.1 n or no incorrections roposed pro- roposed) sed effluent	9.3 62.7 dustrial efflu oject (Whiche
6. Brief gene is ap D-4 Exist Exist Clear CETF D-5 For I Capa For I	justification ration or no plicable). Not Applic Mode ing and Pro- oomestic: ndustrial: ly mention a p of M/s. ET oomestic wa acity of STP: ndustrial wa puse ETP (P	on in case of b high conce cable e of Disposal & oposed Send to the S Existing load the CMEE about final disp L & CMEE of cment facilities aste water: 5 KLD aste water: T rimary, Secor	of no ntratio & Fina &	proce on efflu I meetir ETP nt send BEIL ent facil Tertiary	TOTAL ss effluent lent generat ng point (Exis to the M/s. E	2.8 40.77 generation ion from pro- sting and P TL & Proposition TL & Proposition TL & Proposition TL & Proposition	280.0 1882.1 n or no indersoposed program roposed) sed effluent	etc.

each stream shall be proposed.

- Primary Treatment
 - Existing ETP 90 KLD

Proposed ETP – 70 KLD

Note: (In case of CETP discharge) :

Management of waste water keeping in view direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP.

- Existing Load of effluent 86.8 KLD (65.3 KLD from existing manufacturing process + 4.5 KLD from scrubber + 12 KLD Boiler Blow down + 5 KLD from Domestic) will be treated in ETP consist of primary treatment & it will be send to CETP of M/s. ETL through tanker.
- Additional load of effluent 72.7 KLD (62.7 KLD from Proposed manufacturing process + 10 KLD washing) will be send to Common MEE.
- Unit will reuse 20 KLD waste water (10 KLD cooling tower blow down reuse in washing & 10 KLD from STP reuse 5 KLD in Gardening + 5 KLD cooling tower).
- Existing effluent stream will be send to the M/s. ETL and proposed effluent stream will be send to the CMEE. Thus, 18 (1)(b) is not applicable to us.

Brief note on adequacy of ZLD (In case of Zero Liquid Discharge):

≻	Additional load of effluent 72.7 KLD (62.7 KLD from Proposed manufacturing process + 10						
KLD washing) will be send to Common MEE.							
D-6	In case of Common facility (CF) i.e. CETP, Common Spray dryer, Common MEE,						
	CHWIF etc.						
	Name of Common facility (CF) (For waste water treatment)						
	CMEE of M/s. BEIL, Ankleshwar						
	Membership of Common facility (CF) mentioning total capacity, consented						
	quantity, occupied capacity and spare capacity and norms of acceptance of						
	effluent from member units in-line with the direction given by GPCB vide Letter No.						
	GPCB/P-1/8-G (5)/550706 dated 08/01/2020.						
	> Unit will obtained.						
D-7	Simplified water balance diagram with reuse / recycle of waste water (Existing						
	and Proposed)						



Existing &	Prop	osed					
	Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
			AS PER	Existing	CCA No:-	A - 93828	
	1	Boiler (3 TPH)	12	Natural Gas	1990 Nm3/ Day	PM SO ₂ NO _X	120 mg/Nm ³ 80 ppm 40 ppm
	2	Thermic Fluid Heater (2 Lac/Kcal)	12	Natural Gas	657 Nm3/ Day	PM SO ₂ NO _X	120 mg/Nm ³ 80 ppm 40 ppm
	3	D.G.Set (750 KVA)	12	Diesel	84 lit/Hr.	PM SO ₂ NO _X	120 mg/Nm ³ 80 ppm 40 ppm
			As p	er propo	sed expar	ision	
	4.	Boiler (3 TPH)	22	Natural Gas	1990 Nm3/ Day	PM SO ₂ NO _X	120 mg/Nm ³ 80 ppm 40 ppm
	5.	Thermic Fluid Heater (2 Lac/Kcal)		Natural Gas	657 Nm3/ Day	PM SO ₂ NO _X	120 mg/Nm ³ 80 ppm 40 ppm
	6.	D.G.Set (750 KVA)	12	Diesel	84 lit/Hr.	PM SO ₂ NO _X	120 mg/Nm ³ 80 ppm 40 ppm
E-3	Proc	ess gas i.e.	Type of p	ollutant g	pases (\overline{SO}_{2}	HCI, $NH_{3,}CI_{2,}$	NO _x etc.)
Existing &	Sr.	osed Specific Source of emission (Name of the Product & Process)	Type emissic i.e. A Polluta (SO2, H Cl etc	of ons ir H nts (I ICI, :.)	ick/Vent leight neter)	Air Pollutio Measu (APC	n Control ures :M)
	1	Reaction vessels	SO ₂ HCI NO _x		25	Alkali Scru	ıbber

	2	Reaction vessels	SO ₂ HCI NO _x	25	Alkali scrubber + Water Scrubber	
	3	Reaction vessels	NH ₃	25	Acid Scrubber	
•	Tota	l after propo	sed expansi	on		
	1	Reaction vessels	NO _x	25	Water Scrubber + Alkali scrubber	
	2	Reaction vessels	SO ₂ HCI	25	Water Scrubber + Alkali Scrubber	
	3	Reaction vessels	NH_3	25	Water Scrubber + Acid Scrubber	

Note:

- > Details of gaseous raw materials used in proposed project
- > Estimation of process gas emission (Product wise and Total)
- Requirement of the scrubbing media (KL per Day) considering solubility (Product wise and Total)
- > Yearly generation of all bleed liquors (MT/KL per Annum) as mentioned above and its sound management in HW matrix.

E-4

Fugitive emission details with its mitigation measures.

Sr. No.	Source	Probable Pollutant Emission	Control Measures/ APCM
FUGI	TIVE EMISSION		
1	Raw material storage tank	Air pollutant (VOC)	 i) Carry out work place area monitoring to find out concentration level in ambient air. ii) Provision of breather valve cum flame arrester.
2	Raw Material recovery system	Air pollutant (VOC)	ii) Pumps & motors are mechanical seal type.
3	Handling of raw material bags in storage area	Air pollutant (PM)	 i) Provision of exhaust ventilation ii) Provision of PPE. iii) Provision of Job rotation to reduce exposure.
	Flange joints of pipeline, pump & motors	Air pollutant (VOC)	 i) Routine &periodic inspection to check leakage. ii) Preventive maintenance, Follow SOP for maintenance. iii) Pumps & motors will be mechanical seal type. iv) LDAR program will be

	5	Solid raw mat transferring to reactor Liquid raw ma	erial Ai (P aterial Ai	r pollutant 'M) r pollutant		Provision Hopper powder Feedina	n of Flange guard. will be provided with transfer system. of liquid raw					
		transferring to reactor	o (∨	ÓĊ)		material by close mechani	will be carried out d pipeline and ical seal pump.					
	7	Loading /unlo at storage are	ading Ai a (V	r pollutant ′OC)		Unloadir to tank ii	ng through pipelin n a close system.					
F	Haz	Hazardous waste										
	(As	per the Hazardous	and Othe	r Wastes (N	lanagement	t and Tra	Insboundary					
	Mov	ement) Rules 2016	6.									
	Note	2										
		Priorities for H	IW Manag	jement: Pre	e-processing	g, Co-Pro	ocessing,					
		Reuse/Recycle	within pre	mises, Sell	out to actua	al users ł	naving Rule-9					
		permission, TS	DF/CHWI	4.								
		Quantification	of hazard	lous waste	shall be ba	ased on	mass balance and					
		calculations s	hall be inc	corporated	in EMP det	tails sep	arately.					
		Disposal to sc	rap vende	ors/vendors	s/traders is	not allo	owed					
F-1	Haz	Disposal to sc ardous waste ma	rap vende anagemen	ors/vendors	s/traders is	not allo	owed					
F-1 Exist	Haz ing & Prop	 Disposal to sc ardous waste ma bosed Specific 	anagemen	ors/vendors	s/traders is	not allo	Disposal					
F-1 Exist Sr. no	Haz ing & Prop Type/Na me of	 Disposal to sc ardous waste ma bosed Specific Source of 	crap vende anagemen Catego ry and	ors/vendors t matrix Quant	s/traders is	not allo	Disposal Method					
F-1 Exist Sr. no	Haz ing & Prop Type/Na me of Hazardou s waste0	 Disposal to sc ardous waste ma Specific Source of generation (Name of the 	Catego ry and Sched ule as	Quant Existing Increase Decrea	s/traders is ity (MT/Anr Propose d	not allo	Disposal Method					
F-1 Exist Sr. no	Haz Haz Type/Na me of Hazardou s waste0	 Disposal to sc ardous waste management bosed Specific Source of generation (Name of the Activity, Product etc.) 	Catego ry and Sched ule as per HW Rules.	Quant Existing Increase Decrea Se	ity (MT/Anr Propose d Increase /Decrea se	not allo	Disposal Method					
F-1 Exist Sr. no	Haz ing & Prop Type/Na me of Hazardou s waste0	 Disposal to sc ardous waste management bosed Specific Source of generation (Name of the Activity, Product etc.) From Packing Material 	Catego ry and Sched ule as per HW Rules. 33.1	Quant Existing Increase /Decrea se	ity (MT/Anr Propose d Increase /Decrea se 281.8	not allo num) Total	Disposal Method Collection, Storage, decontamination , Disposal by					
F-1 Exist Sr. no	Haz ing & Prop Type/Na me of Hazardou s waste0	 Disposal to sc ardous waste management posed Specific Source of generation (Name of the Activity, Product etc.) From Packing Material 	Catego ry and Sched ule as per HW Rules. 33.1	Quant Existing Increase /Decrea se	ity (MT/Anr Propose d Increase /Decrea se 281.8	not allo num) Total	Disposal Method Collection, Storage, decontamination , Disposal by send it to					
F-1 Exist Sr. no	Haz ing & Prop Type/Na me of Hazardou s waste0 Empty barrels/co ntainers/li ners contamina te with hazardou	 Disposal to sc ardous waste management posed Specific Source of generation (Name of the Activity, Product etc.) From Packing Material 	Catego ry and Sched ule as per HW Rules. 33.1	Quant Existing Increase /Decrea se	ity (MT/Anr Propose d Increase /Decrea se 281.8	not allo num) Total	Disposal Method Collection, Storage, decontamination , Disposal by send it to authorized decontamination					
F-1 Exist No	Haz ing & Prop Type/Na me of Hazardou s waste0 Empty barrels/co ntainers/li ners contamina te with hazardou s	 Disposal to sc ardous waste material Specific Source of generation (Name of the Activity, Product etc.) From Packing Material 	Catego ry and Sched ule as per HW Rules. 33.1	Quant Existing Increase /Decrea se	ity (MT/Anr Propose d Increase /Decrea se 281.8	not allo	Disposal Method Collection, Storage, decontamination , Disposal by send it to authorized decontamination facility / recycler					
F-1 Exist Sr. no	Haz ing & Prop Type/Na me of Hazardou s waste0 Empty barrels/cc ntainers/li ners contamina te with hazardou s chemicals /wastes	 Disposal to sc ardous waste management posed Specific Source of generation (Name of the Activity, Product etc.) From Packing Material 	Catego ry and Sched ule as per HW Rules. 33.1	Quant Existing Increase /Decrea se	ity (MT/Anr Propose d Increase /Decrea se 281.8	not allo	Disposal Method Collection, Storage, decontamination , Disposal by send it to authorized decontamination facility / recycler or reuse or send back to					
F-1 Exist Sr. no	Haz ing & Prop Type/Na me of Hazardou s waste0 Empty barrels/cc ntainers/li ners contamina te with hazardou s chemicals /wastes	 Disposal to sc ardous waste management posed Specific Source of generation (Name of the Activity, Product etc.) From Packing Material From Effluent 	Catego ry and Sched ule as per HW Rules. 33.1	Quant Existing Increase /Decrea se	ity (MT/Anr Propose d Increase /Decrea se 281.8	not allo num) Total	Disposal Method Collection, Storage, decontamination , Disposal by send it to authorized decontamination facility / recycler or reuse or send back to supplier Collection,					
F-1 Exist Sr. no	Haz ing & Prop Type/Na me of Hazardou s waste0 Empty barrels/co ntainers/li ners contamina te with hazardou s chemicals /wastes Chemical Sludge	 Disposal to sc ardous waste material Specific Source of generation (Name of the Activity, Product etc.) From Packing Material From Effluent treatment 	Catego ry and Sched ule as per HW Rules. 33.1	Quant Existing Increase /Decrea se 19.2	ity (MT/Anr Propose d Increase /Decrea se 281.8	not allo num) Total 300	Disposal Method Collection, Storage, decontamination , Disposal by send it to authorized decontamination facility / recycler or reuse or send back to supplier Collection, storage within					
F-1 Exist No	Haz ing & Prop Type/Na me of Hazardou s wasted Empty barrels/co ntainers/li ners contamina te with hazardou s chemicals /wastes Chemical Sludge from waste	 Disposal to scardous waste management Specific Source of generation (Name of the Activity, Product etc.) From Packing Material From Effluent treatment plant 	Catego ry and Sched ule as per HW Rules. 33.1	Quant Existing Increase /Decrea se 19.2	ity (MT/Anr Propose d Increase /Decrea se 281.8	not allo num) Total 300	Disposal Method Collection, Storage, decontamination , Disposal by send it to authorized decontamination facility / recycler or reuse or send back to supplier Collection, storage within factory premises					

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	treatment						and Disposal at TSDF
3.	Used or Spent oil	From Lubrication	5.1	0.0051	2.99	3.00	Collection, storage, transportation & Reuse in plant & machinery as lubricant or sell it to authorized re-refiners / Recycler
4	Process Residue & waste	From Production process	28.1	5	325	330	Collection, Storage, Transportation & send to the Co- processing / Incineration
5	Spent Catalyst	From Production process	28.2	2.4	168	170.4	Collection, Storage, and send to authorized units for regeneration who are having rule-9 permission
6	Spent Carbon	From Production process	28.2	24	176	200	Collection, Storage, Transportation & Send for Co- Processing/Com mon Incineration.
7	Sodium Nitrate Solution	From oxidation (Benzoic Acid Derivatives) + (Nitro Benzoic Acid derivatives) + (Sulfomoyl Benzoyl acid derivatives) & Scrubbing media	26.1	1800	5200	7000	Collection, Storage, and send to authorized units who are having rule-9 permission. If rule 9 is not available than it will be send to
8	Dilute Ammoniu m Sulphate Solution	Process ([from chlorosulfonati on (Sulfomoyl Benzoyl acid Derivatives) + (2 amino benzoic acid derivatives)	26.1	9600	15600	25200	TINE ETP.

		(Scrubbing Media)]					
9	Spent Sulfuric Acid	Sulfomoyl Benzoyl acid Derivatives) + (2 amino benzoic acid derivatives)]	26.3	10800	16875	27675	
10	Dilute HCI solution	Sulfomoyl Benzoyl acid Derivatives) + (2 amino benzoic acid derivatives)] (Scrubbing Media)	26.3	960	1590	2550	
11	Dilute Nitric Acid	From Nitration (nitro benzoic acid derivatives)	26.3	2400	8550	10950	Collection, Storage, and send to authorized units who are having rule-9 permission. If rule 9 is not available than it will be send to the ETP or Reuse within premises.
12	Date expired Product	From premises	28.4	0	10	10	Collection, storage, transportation, co-processing in cement plants.
13	Off- specificati on Product	Production process	28.5	0	10	10	Collection, storage, transportation, co-processing in cement plants.
F-2	Memb (For H	ership details of 1 IW management	rsdf, CH)	WIF etc.			
Detail	s of Member	ship letter no. & D	Date with s	spare capac	ity of the C	Common F	Facility.
F_2	Detail	s of Non-Hazardo	us waste	& its dispos	al -		

	(MSW a	nd others)					
	Sr. no.	Type/Name of Other wastes	Specific Source of generation (Name of the Activity, Product etc.)	Quantity (MT/Annun	Managen n) of Waste	nent s	
	1	Glass Waste	Glass Material	1 MT/Annum	To TSDF	4	
	2	Waste	Stationary		area facili	ity	
G	Solvent	management	, VOC emiss	ions etc.			
G-1	Brief No recovere	te on types of sed Solvents etc	solvents, Det :.	ails of Solvent i	recovery, % rec	overy, reuse of	
Sr. No.	Name of solvent us	ed Solven (MT/Mo	t Quantity onth)	Fresh Solvent quantity (MT/Month)	Recovered Solvent quantity (MT/Month)	Percentage Recovery %	
1.	Ethanol		360	349	11	97	
a > (t > /	addition to LI Company wil o prevent lea	DAR program I be installed o akage from flar	double mechanges like pumps v	anical seal and will be installed	MSW Gaskets	s in solvent pipe Mechanical Sea	lines
6	arrest any so	rt of emissions					
≻ F	langes will b	be sealed so le	ss losses wil	l be there.			
> (Closed loop s	system.					
>	mmediate R	epair of device	s in case of L	_eakages			
<i>ا</i> ۲	A regular pre and joints etc	ventive mainte to ensure no f	enance schec fugitive emiss	lule will be in p sions shall take	lace to replace place.	or rectify all gas	skets
≻ F t	Plant shall al he leaking d	lso maintain ao evice	dequate num	ber of spares a	and consumable	es required to re	epaiı
F حر s	Plant shall a same immed	lso have comp iately	etent contra	ctor team to ha	andle Leakages	s and can repai	r the
> 3	Standby equi	ipment like Pur	nps, valves e	etc. shall be kep	ot basis the criti	cality and usage	;
► F	Plant shall a	also have acc	ess equipme	ent like Boom	lift to handle	leakages at h	eiaht

- Monitoring of Solvent Losses
- In warding, storage and consumption of solvents in various products shall be measured through Level Transmitters and Load cells weighing systems resp. The quantity at each stage shall be reconciled periodically to arrive at Losses
- > Periodic monitoring of work area will be carried out to check the fugitive emission.

G-3		VOC emission sources and its mitigation measures
À	Uni emi	t will provide proper solvent recovery system with scrubber and carbon to stop air ssion.
	Due proe moi	e to Manufacturing process and solvent handling chances of VOC emissions. Entire cess and material charging has been carried out in closed loop. Regular work place nitoring will be done. SOP will be followed to handle powder and liquid raw materials
Н		SAFETY details
H-1		Details regarding storage of Hazardous chemicals
		(For tank storages only including spent acid and spent solvent tanks)

Sr. no.	Name of Chemical	Capacity of Tank	Number of Tanks	Hazardous Characteristics of Chemical
1	60 % Nitric Acid	14 KL 10 KL	1	Acidic, Corrosive
2	98 % Nitric Acid	14 KL	1	Acidic, Corrosive
3	Caustic soda Lye	12 KL	1	Corrosive
4	Sulfuric Acid	12 KL	1	Acidic, Corrosive
5	Chloro Sulfonic Acid	13 KL	2	Acidic, Corrosive
6	Liquor Ammonia	12 KL	1	Toxic
7	Dilute Sulfuric acid	15 KL 10 KL 7.5 KL	1 1 3	Acidic, Corrosive Hazardous waste
8	Hydrochloric Acid	15 KL	1	Acidic, Corrosive Hazardous waste
9	Ammonium sulfate Solution	20 KL 60 KL	1	Hazardous waste
10	Dilute Nitric acid	7.5 KL	2	Acidic, Corrosive Hazardous waste
11	Sodium Nitrite Solution	10 KL 7.5 KL	1	Hazardous waste

Brief note on storage of Hazardous chemicals in Tanks

Brief note on storage of Hazardous chemicals other than Tanks i.e. Drum, Barrels,

<u>Carboys, Bags etc.</u>

MOC of drum will be as per compatibility of chemical and drum materials. Unit will provide flame proof electrical fitting as and firefighting measures to eliminate fire as well as other hazard. Spillage kit will be available at require area.

Safety details of Hazardous Chemicals:

Type of		Safety measures
Hazardou	IS	
Chemical	S	
Flammab	le	Storage in compatible storage unit with flame proof fitting, also provide
		firefighting measures. Only trained person allowed to handle
Corrosive)	Storage in compatible storage unit with safe distance with other
		chemicals, Only trained person allowed to handle
Toxic		Storage in compatible storage unit with safe distance with other
		chemicals, Only trained person allowed to handle
> App	olicabilit	y of PESO :
H-2	Types	of hazardous Processes involved and its safety measures:
	(Hydro	genation process, Nitration process, Chlorination process, Exothermic
	Reaction	on etc.)
-		
Type of	Safety	y measures including Automation
Process		
Hydroge	FLP ty	vpe area will be provided.
nation	Total e	enclosed process system.
	Nitroa	en blanketing in Hydrogenation reactor.

Safety valve and Rupture disc provided on reactor.

Cooling Chilling and power alternative arrangement have been made on reactor.

Hydrogen and Nitrogen Cylinder bank away from the auto clave reactor.

PRV station with shut off valve, safety valve provision will be made for hydrogenation reaction safety. Before Hydrogen Gas charging in to reactor and after completion of reaction Nitrogen Blanketing will be done.

Flame arrestor will be provided on vent line of reactor and it will be extended up to roof level.

Open well ventilated and fragile roofs will be provided to on reactor.

Safe Catalyst charging method will be adopted.

SOP will be prepared and operators will be trained for the same.

Static earthing and electric earthing (Double) provided.

Reactor vent extended outside the process area and flame arrestor provided on vent line.

	Dumping vessel arrangement will be made. Dumpers for static earthing on pipeline flanges of flam	mable chemical will be	
	provided.		
Chlorinat ion	Chlorine handling area is kept well ventilated. Chlorine Emergency Kit is procured and kept ready at Chlorine Hood with blower is provided with scrubbing SCBA sets are kept ready at chlorine handling area. Safety Shower and eye wash is provided in Chlorine s Chlorine absorption system is provided. In case of chl shed, it will be suck through blower and it will be scrubbed in Caustic scrubber. Emergency siren and wind sock is provided. Tele Communication system and mobile phones emergency situations for communication. First Aid Boxes and Occupational health centre is mad Full body protection suite and other PPEs are kept read Emergency team is prepared and trained for scenario Toxic control team, Fire control team, First	chlorine shed. arrangement. shed area. orine leakage in chlorine are used in case of de at site. ady in ECC at site. o base emergency. Like	
Nitration	aid team, Communication and general administration in Nitration will be done in closed S.S vessels. Nitric acid will be used for nitration process. Nitric corrosive acid capable of causing severe chemic Because of the hazards posed by nitric acid, it is in measures whenever handling it. In our nitration process, exothermic reaction will be dosing of reaction chemicals in a fixed time (not adequate cooling water circulation in jacket of react energy generated due to exothermic reaction will be cooling circulation and therefore vessels will not be pro- The nitration reaction will be controlled by system withdraw the energy evolved. Adequate pressure relia- for each vessels having pressure release capacity kg/cm2than that of reaction vessels. Details of Fire Load Calculation	team, Medical team etc. c acid is an extremely cal burns very rapidly. mportant to take safety controlled by adequate short duration) having tion vessels. Thus, any e controlled by external essurized. natic cooling design to ef valve will be provided will be kept below -3	
		6144	
		0144	
	Area utilized for plant activity:	868.64	
	Area utilized for Hazardous Chemicals Storage:	360.88	
		300.80	
	Number of Floors:	G+4	
	Number of Floors: Water requirement for firefighting in KLD :	G+4 	
	Number of Floors: Water requirement for firefighting in KLD : Water storage tank provided for firefighting in KLD:	G+4 300 KL Existing + 200 KL Proposed	
	Number of Floors: Water requirement for firefighting in KLD : Water storage tank provided for firefighting in KLD: Details of Hydrant Pumps:	G+4 300 KL Existing + 200 KL Proposed 	
	Number of Floors: Water requirement for firefighting in KLD : Water storage tank provided for firefighting in KLD: Details of Hydrant Pumps: Nearest Fire Station :	G+4 300 KL Existing + 200 KL Proposed 3.6 KM	

		(Leucovorin),	
		Methylene Blue, 0	.4%
		Benzocaine	
		(Novocaine) soluti	on
		for eye, Dexona,	
		Avil	
SH-4	Details of Fire NOC/Certificate:		
Unit wil	l obtained.		
H-5	Details of Occupational Health Centre (C	OHC):	
-			
	Number of permanent Employee :	160	
	Number of Contractual person/Labour :	20	
	Area provided for OHC:	15	
	Number of First Aid Boxes :	5	
	Nearest General Hospital :	3.9 KM	
		JayabenModi Hospital	
	Name of Antidotes to be store in plant :	Diazem – 1 mg/kg	
		(Intravenous), Epenep	
		hia, Efidrine,	
		Folinicacid	
		(Leucovorin),	
		Methylene Blue, 0.4%	
		Benzocaine	
		(Novocaine) solution	
		for eye, Dexona,	
		Avil	

- During meeting, PP presented revised product profile with removing para chloro benzoic acid & Ortho Chloro Benzoic acid from it. Also PP submitted revised the product profile, Raw material List and Manufacturing process. Water, Air and Hazardous waste details are remain same as per previous report. Committee noted that PP presented revised water balance diagram with mentioning reuse of boiler condensate.
- Committee found reply submitted by PP along with supporting documents was satisfactory.

 After detailed discussion, Committee unanimously decided to recommend the project to SEIAA, Gujarat for grant of Environment Clearance with the following specific condition:
 SPECIFIC CONDITIONS:

1. Project Proponent (PP) shall strictly abide by the outcome/decision of Hon'ble Supreme Court of India in Civil

Appeal no. 8478/2020 regarding operation of the Hon'ble NGT orders dated 10/07/2019 & 14/11/2019.

- PP shall comply conditions of any subsequent amendment or expansion or change in product mix, after the 30th September 2020, considered as per the provisions in force at that time as mentioned in the Notification vide S.O. 1223 (E) dated 27/03/2020.
- PP shall carry out proposed project/activities in respect of Active Pharmaceutical Ingredients (API) as per the amended EIA Notification vide S.O. 1223 (E) dated 27/03/2020 and any subsequent amendments.
- PP shall submit six monthly compliance report of Environmental Clearance without fail and the same shall be critically assessed by the regulatory authority.
- Total number of products manufacturing shall not exceeding three (3) at a given point of time as per the plant capacity shown in plant layout.
- 6. R & D products shall be of similar chemistry in line with the EIA Notification vide S.O. 1223 (E) dated 27/03/2020 and the pollution load shall remain the same as committed. (b) Project proponent shall not take continuous/commercial production of the R & D materials. Necessary approvals shall be obtained from the concern authorities prior to commercial production of R & D materials. (c) Unit shall submit relevant details of R & D products like raw materials, its safety measures to the regulatory authority well before R & D activity. (d) Unit shall submit relevant details of R & D products like raw materials of R & D products like different wastes generated (Quantity & Quality) and its management to the regulatory authority within a month of R & D activity.
- 7. Unit shall install CEMS[Continuous Emission Monitoring System] in line to CPCB directions to all SPCB vide letter no. B-29016/04/06PCI-1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis. [For Small/Large/Medium (Red Category) & Whichever (Air emission & Effluent discharge) is applicable].
- Close loop solvent recovery system with adequate condenser system shall be provided to recover solvent vapours in such a manner that recovery shall be maximum and recovered solvent shall be reused in the process within premises.
- Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines.
 LDAR Logbooks shall be maintained.
- 10. All measure shall be taken toavoid soil and ground water contamination within premises.
- 11. GPCB shall ensure compliance of direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP and also that the pollution load is not increased in the CPA/SPA for the compliance of Hon'ble NGT order.

<u>WATER</u>

12. Total water requirement for the project shall not exceed 196 KLD. Unit shall reuse 25 KLD of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 171 KLD and it shall be met through GIDC water supply only. Prior permission from concerned authority shall be obtained for withdrawal of water.

- 13. The industrial effluent generation from the project shall not exceed 164.90 KLD after expansion.
- 14. Industrial effluent shall be segregated into two streams (1) High COD and TDS effluent (2) Low COD and TDS effluent and it shall be managed as below.

• High COD and TDS effluent (72.70 KLD)

72.70 KLD, High COD and TDS effluent from process and washing shall be treated in ETP-1 and then treated effluent shall be sent to CMEE of M/s BEIL through GPS fitted tanker for evaporation.

• Low COD and TDS effluent (81.80 + 10 KLD):

- 81.80 KLD, Low COD effluent from process, utilities, & scrubber shall be treated in ETP-2 consists of primary units. Then treated effluent shall be sent to CETP of M/s ETL, Ankleshwar for further treatment & disposal.
- 10 KLD industrial effluent generated from cooling blow down shall be directly reused back for washing purpose within premises.
- 15. Project proponent (PP) shall adopt appropriate methods for segregation of waste water streams based on characteristics at source and its sound management keeping in view direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP.
- 16. Treated waste water shall be sent to CETP of M/s. ETL, Ankleshwar only after complying with the inlet norms of common facilities prescribed by GPCB to ensure no adverse impact on Human Health and Environment.
- 17. Unit shall sent wastewater to CMEE only after ensuring content of effluent for COD/VOC so as not to get air borne during evaporation in order to achieve no adverse impacts on Environment and Human Health.
- 18. Domestic wastewater generation shall not exceed 5 KL/day for proposed project and it shall be treated in ETP. It shall not be disposed off through soak pit/ septic tank.
- Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during ant shut down of CMEE.

<u>AIR</u>

- 20. Unit shall not exceed fuel consumption and provide APCM and Stack height as mentioned in flue gas matrix.
- 21. Unit shall provide APCM and stack height as mentioned in process gas matrix.

HAZARDOUS & SOLID WASTE

- 22. All hazardous solid waste shall be managed as mentioned in hazardous waste matrix.
- 23. The unit shall submit the list of authorized end users of hazardous wastes along with MoU signed with them at least two months in advance prior to the commencement of production. In the absence of potential buyers of these items, the unit shall restrict the production of the respective items.

GREENBELT AREA

24. The PP shall develop green belt within premises (3739 Sq. m i.e. > 33 % of the total plot area) as per the undertaking submitted before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.

25. <u>Safety & Health:</u>

- a) Unit shall obtain all required permissions from the Narcotics Control Bureau for storage and handling of Acetic Anhydride & any such chemicals.
- b) PP shall obtain PESO permission for the storage and handling of hazardous chemicals.
- c) PP shall provide Occupational Health Centre (OHC) as per the provisions under the Gujarat Factories Rule 68-U.
- d) PP shall obtain fire safety certificate / Fire No-Objection certificate (NOC) from the concern authority as per the prevailing Rules / Gujarat Fire Prevention and Life Safety Measures Act, 2016.
- e) Unit shall adopt functional operations/process automation system including emergency response to eliminate risk associated with the hazardous processes.
- f) PP shall carry out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in the manufacturing area in case of any emergency or accident.
- g) PP shall install adequate fire hydrant system with foam trolley attachment within premises and separate storage of water for the same shall be ensured by PP.
- h) PP shall take all the necessary steps for control of storage hazards within premises ensuring incompatibility of storage raw material and ensure the storage keeping safe distance as per the prevailing guidelines of the concerned authority.
- i) PP shall take all the necessary steps for human safety within premises to ensure that no any harm is caused to any worker/employee or labour within premises.
- j) Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.
- k) Unit shall never store drum/barrels/carboys of incompatible material/chemical together.
- I) Unit shall provide effective Isolation for Process area and storage of hazardous chemicals.
- m) Unit shall provide water sprinkler to the ammonia storage cylinder.
- n) Unit shall provide chlorine leakage control emergency kit and FRP hood with scrubber system for chlorine safety.
- O) Unit shall provide safety valve and rapture disc, as well as auto dump or auto quench/, suppress system for nitration vessel safety.
- p) Unit shall provide safety valve & rupture disc to the Hydrogenation vessel.

3.	SIA/GJ/IND2/60438/2009	M/s. Shubhlaxmi Pigments	EC-Reconsideration
		Plot No. 502, GIDC Panoli, Ta: Ankleshwar, Dist: Bharuch, Gujarat	

Category of the unit: 5(f)

Project status: Expansion

- Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/60438/2009 on dated 14/02/2021 for obtaining Environmental Clearance.
- SEIAA issued TOR to PP vide letter dated 17/06/2019.
- Project proponent has submitted EIA Report prepared by M/s. Jyoti Om Chemical Research Centre Pvt. Ltd based on the TOR issued by SEIAA.
- This is an existing unit and now proposed for expansion in manufacturing of synthetic organic chemicals as mentioned below:

Sr.	Name of the	CAS	Quantity N	MT/Month	1	End Use
No	Products	no. /Cl				of the
•		no.				product
			Existing	Propos	Total	
				ed		
1.	Phthalocyanine Alpha Blue	147-14-8	5.0	25.0	30.0	Plastic, Ink,
2.	Phthalocyanine Beta Blue	147-14-8	10.0	50.0	60.0	Textile,
						Detergent
		TOTAL			90.0	

- The project falls under B1 category of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for Video conference meeting for presentation on dated 25.05.2021.
- During the SEAC Video conference meeting dated 25.05.2021, Project Proponent (PP) and their technical expert and EIA consultant from M/s. Jyoti Om Chemical Research Centre Pvt. Ltd remain present and made technical presentation before the Committee.
- During the meeting, the project was appraised based on the information furnished in the EIA Report and details presented during the meeting.
- The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted for the study area of 10 km radial distance from project site for the period March 2018 to May 2018. Ambient Air Quality monitoring was carried out for PM₁₀, PM_{2.5}, SO₂, NOx, CO, HC and VOCs at Eight locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using "AERMOD". The resultant concentrations are within the NAAQS. The modeling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).
 - Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios

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has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan has been covered in the RA report.

- Upon asking regarding QCI/NABET accreditation for preparation of EIA preparation for proposed project, technical expert of PP informed that they have applied for QCI/NABET accreditation for preparation of EIA/EMP report as per the amended EIA Notification vide S.O. 648 (E) Dated 03.03.2016 and is under process.
- This is an existing unit and now applied for expansion of project proposed for manufacturing of synthetic organic chemicals at GIDC Panoli. Committee asked for status of existing unit, technical expert of PP informed that they have obtained CCA of existing plant before year 2006 and also obtained EC for expansion project in 2008 but due to critically polluted area Moratorium by MoEF & CC for GIDC Panoli area, unit has not converted into CTE and CCA. Hence Committee asked clarification regarding status of production plant and reason for not converting EC obtained in year 2008 and till date not converted it into CCA. Technical expert of PP informed that they have not converted EC of year 2008 due to GIDC Panoli declared as Critical polluted area in year 2009 and unit has not started expansion project till date and having CCA for existing plant. Also PP has informed that EC was expired for expansion project and again GIDC Panoli falls in CEPI area as per MoEF & CC Moratorium in year of 2017 and again obtained ToR from SEIAA for expansion project in Year 2019. After detailed discussion, Committee insisted for Chronolgy of proposed project from Commissioning of existing plant and existing plant CTE and CCA from GPCB obtained before year 2006 to till date applied for expansion project and authenticated documents regarding production data from Year 2009 to till date as EC for same expansion project obtained by PP in year of 2008. Committee noted that PP has addressed existing plant valid CCA and one Show Cause Notice (SCN) issued by GPCB and its compliance reply submitted by PP at GPCB. PP submitted undertaking showing that there is no legal court case and public complaint against unit. Product profile with its end-use is discussed in depth. Source of water supply is GIDC. Committee noted that PP has addressed area adequacy with layout plan for proposed project site. Looking to expansion project in same plant premises area, Committee insisted for readdress specific ToR no-1 precisely with each and every points in specific ToR no-1 regarding area adequacy for expansion plant along with clarification regarding area adequacy for proposed expansion project in same existing plot area with existing and proposed plant machinery, reaction vessels provided for proposed project with details regarding reactor capacity and reaction time for proposed product, Raw material and finished goods storage area adequacy for proposed and existing plant in tabular form, utility, ETP area, green belt area, peripheral road etc.
- Committee deliberated on Process safety, area adequacy and layout plan, Fire safety, water balance & waste water management, Flue gas and process gas emission & Air Pollution Control System, Hazardous waste matrix, EMP, CER, LDAR and solvent recovery, Green belt, Risk assessment, baseline data etc.Looking to Green belt area outside premises letter of GIDC Notified area, Committee insisted for submission of revised GIDC Notified area letter with mentioning for area provided for green belt area for PP is not allocated to another industry in future and details of How many trees planted in Proposed green belt area, along with Longitude and Lattitude of proposed greenbelt area and its maintenance responsibility for green belt

development. Also PP has not presented adequately details regarding baseline data with mentioning incremental ground level concentration due to proposed project, Remedial measures for exceeding parameters under Water, Air and Soil parameters of baseline data and also not submitted its details as per prescribed B1 project format by technical expert of PP.

- Committee noted the following:
 - PP has proposed total industrial effluent, after expansion will be treated in ETP and then will be sent to CETP of PETL, Panoli for expansion project.PP presented permission letter from GPCB for additional waste water discharge to CETP of PETL.
 - ✓ Domestic effluent will be treated in ETP along with industrial effluent.
 - Agro waste/Briquette as fuel for Boiler and hot air generator and separate adequate APCM proposed for it.
 - \checkmark There is no process gas emission.
 - ✓ Exhausted scrubbing media will be selling out as per the HW Rules.
 - ✓ PP submitted hazardous waste matrix mentioning source of generation, quantity and Mode of disposal and committed to comply the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules 2016.
- Looking to ToR submitted by PP found inadequate as specific ToR regarding LDAR and solvent recovery format blank, specific Tor regarding renewable energy found inadequate details for provision of solar energy for proposed project, Hence Committee insisted for submission of revised ToR compliance report for ToR obtained by PP in year 2019 for proposed project with mentioning each and every specific ToR accorded by SEIAA adequately and precisely with technical details.

After detailed discussion, Committee unanimously decided to consider the project in one of upcoming meeting after submission of following documents,

- 1. Prescribed format for B1 project in place of B2 project along with mentioning existing production plant details for proposed project.
- 2. Clarification regarding status of production plant since EC obtained and reason for not converting EC obtained in year 2008 till date it into CCA and again applied for expansion project of EC for same expansion project in year of 2021..
- 3. Readdress specific ToR no-1 precisely with each and every points in specific ToR no-1 regarding area adequacy for expansion plant along with clarification regarding area adequacy for proposed expansion project in same existing plot area and mentioning existing and proposed plant machinery, reaction vessels provided for proposed project with details regarding reactor capacity and reaction time for proposed product, Raw material and finished goods storage area adequacy for proposed and existing plant in tabular form, utility,ETP area, green belt area, peripheral road etc
- 4. Submit Chronolgy of proposed project from Commissioning of existing plant and existing plant CTE and CCA from GPCB obtained before year 2006 to till date applied for expansion project and authenticated documents regarding production data from Year 2009 to till date as EC for same expansion project obtained by PP in year of 2008
- 5. Revised GIDC Notified area letter with mentioning for area provided for green belt area for PP is not

allocated to another industry in future and details of How many trees planted in Proposed green belt area, along with Longitude and Lattitude of proposed greenbelt area and its maintenance responsibility for green belt development.

- 6. Adequate details regarding baseline data with mentioning incremental ground level concentration due to proposed project, Remedial measures for exceeding parameters under Water, Air and Soil parameters of baseline data in study area of proposed project which is submitted in EIA report for proposed project.
- Submission of revised ToR compliance report for ToR obtained by PP in year 2019 for proposed project with mentioning each and every specific ToR accorded by SEIAA adequately and precisely with technical details.
- PP submitted reply of above query generated on SEAC VC meeting dated 25/05/2021 through e-mail.
- This proposal is reconsidered in SEAC meeting dated 05.08.2021. PP along with their technical expert/consultant, M/s. Jyoti Om Chemical Research Centre Pvt. Ltd remains present in the meeting and made presentation before Committee.
- PP submitted revised product profile as above and revised salient features of water, air and Hazardous waste management are as under,

Sr. no.	Partic	ulars					Details					
A-1	Total cost of Proposed Project											
	(Rs. in Crores):											
		E	xisting	Proposed 0.40 Crores		Total						
		1	.22 Crores			1.62 Crores						
	Break	-up of propos	ed project Cost	::				-				
		Details	Existing		Proposed	ד	otal					
			(Rs. In Crores) 0.27		(Rs. In Crores) 0.00		(Rs. In Crores) 0.27					
		Land										
		Building	0.12	0.03	0.15	0.15						
	Machiner		0.67	0.04		0	0.71	_				
		Miscellane	9 0.16		0.23	C	.39					
A-2	Detai	Is of Environ	mental Manag	ement l	Plan (EMP))	As below:					
Sr. No	Unit		Detail		Capital Cost (Rs In Crores	. Co s)	otal Recurring ost (Rs. In La) cs)				
1	Waste	Water	Primary ETP Send to PET	& L	8.0	-	33					
2	Air		Scrubber		7.0		2.5					
3	Hazard Manage	ous ement	HWSA, Membership	Of	2.0		1.0					

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		Total	48	49.5
9.	CER Activity	Unit will carry out CER activities in Kosamadi Village	2.0	1.0
8.	PLC Automation System	Solvent Recovery Plant	10.0	2.0
7.	Occupational Health	First Aid Kit, Bed, etc.	5.0	1.0
6.	Green Belt Development	Plants, Tree Guard, Manure	2.0	3.0
5	AWH Monitoring	Auditing		3.0
4	Fire & Safety	Fire Extinguisher, Fire Hydrant Line , First Aid Kit, Smoke detector	12	3.0
		TSDF and Co processing of Hazardous Waste & Disposal		

Summary

Cost of Project in Crores per Annum:	1.62
EMP Capital Cost in Crores per Annum and	0.48
Percentage:	
EMP Recurring Cost in Crores per Annum	0.49
and Percentage:	

A-3 Details of CER as per OM dated 01/05/2018 (In case of project falls under CPA/SPA, CER fund allocation to be at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental Clearance as per the mechanism published vide MoEF&CC's OM vide 31.10.2019.)

% as per the OM	Rs. in Crores
1%	3.0

In case of more than % as per the OM, mention the same.

Brief note on proposed activities for CER:

	as planned to spend $\underline{1}\%$ of the project cost Rs. 3 Lacs (he total cost of the project of used in the CER activities.	over a period of five yea Budgetary allocation is	rs towards CER activity. given in below table.							
Sr. No.	Ac	tivity	(Capital Cost Y1	(c) Recurring (Y2	Cost						
1 I ¹	nstallation and maintenance	e of RO plant in primary sc	hool 2.5 Lacs	0.5 Lacs							
a	t Bakarol village		251.905	0.51.905							
D	Land / Dist ow	norobin dotoilo.									
В 	Plot area	nersnip details:									
D-1		Existing	Proposed	Total							
		1575 Sq. m.	0 Sq. m.	1575 Sq. m.							
B-2	Brief note on A	rea adequacy in lin	e to proposed pro	oject activities:							
	Total plot area of the unit is 1575 Sq.mt.										
	Existing production building is having ground floor facility.										
	The unit is having total 2 Nos. of manufacturing facilities.										
	Alpha Pl	Alpha Plant is having 179.68 Sq meter and Beta Plant is having 368.64									
	Sq.mt.										
	ETP are	a is 58.50 Sq.meter	·.								
	ETP areTotal uti	a is 58.50 Sq.meter lity area is 35 Sq.me	eter.								
	ETP areTotal utiThe raw	a is 58.50 Sq.meter lity area is 35 Sq.m [.] material storage ar	eter. ea is 63.00 Sq.m	eter.							
B-3	 ETP are Total uti The raw 	a is 58.50 Sq.meter lity area is 35 Sq.m material storage ar a	eter. ea is 63.00 Sq.m	eter.							
B-3	 ETP are Total uti The raw Green belt area	a is 58.50 Sq.meter lity area is 35 Sq.me material storage ar a Existing	eter. ea is 63.00 Sq.m Proposed	eter.							
B-3	 ETP are Total uti The raw 	a is 58.50 Sq.meter lity area is 35 Sq.me material storage ar a Existing	eter. ea is 63.00 Sq.m Proposed (Sq. meter)	eter. Total (Sq. meter)]						
B-3	 ETP are Total uti The raw 	a is 58.50 Sq.meter lity area is 35 Sq.me material storage ar a Existing a in 388.11	eter. ea is 63.00 Sq.m Proposed (Sq. meter) 300	eter. Total (Sq. meter) 688.11							
B-3	 ETP are Total uti The raw 	a is 58.50 Sq.meter lity area is 35 Sq.meter material storage ar a Existing a in 388.11 meter	: eter. ea is 63.00 Sq.m Proposed (Sq. meter) 300	eter. Total (Sq. meter) 688.11							
B-3	 ETP are Total uti The raw Green belt area Are Sq. r % of	a is 58.50 Sq.meter lity area is 35 Sq.meter material storage ar a Existing a in 388.11 meter total 24.64	eter. ea is 63.00 Sq.m Proposed (Sq. meter) 300 19.04	eter. Total (Sq. meter) 688.11 43.68							
B-3	 ETP are Total uti The raw Green belt area Are Sq. r % of	a is 58.50 Sq.meter lity area is 35 Sq.meter material storage ar a Existing a in 388.11 meter total 24.64	eter. ea is 63.00 Sq.m Proposed (Sq. meter) 300 19.04	eter. Total (Sq. meter) 688.11 43.68							
B-3	 ETP are Total uti The raw Green belt area Are Sq. r % of area In case of GRE	a is 58.50 Sq.meter lity area is 35 Sq.meter material storage ar a Existing a in 388.11 meter total 24.64 EN-BELT partly or	eter. ea is 63.00 Sq.m Proposed (Sq. meter) 300 19.04 utside premises	eter. Total (Sq. meter) 688.11 43.68 , give complete de	etails li						
B-3	 ETP are Total uti The raw Green belt area Green belt area Are Sq. r % of area In case of GRE exact location	a is 58.50 Sq.meter lity area is 35 Sq.meter material storage ar a Existing a in 388.11 meter total 24.64 EN-BELT partly of (Lat-Long), Agree	eter. ea is 63.00 Sq.m Proposed (Sq. meter) 300 19.04 utside premises ment/MoU with s	eter. Total (Sq. meter) 688.11 43.68 , give complete de specific area etc.	etails li						
B-3	 ETP are Total uti The raw Green belt area Are Sq. r % of area In case of GRE exact location	a is 58.50 Sq.meter lity area is 35 Sq.meter material storage ar a Existing a in 388.11 meter total 24.64 EN-BELT partly of (Lat-Long), Agreen	eter. ea is 63.00 Sq.m Proposed (Sq. meter) 300 19.04 utside premises ment/MoU with s	eter. Total (Sq. meter) 688.11 43.68 , give complete de specific area etc.	etails li						

									1			
				10		20		20	-			
		-	. L	10		20		30				
	Inc	ase of	Indirec	t employ	ment, G	ve deta	ails.					
D	WA	WATER										
D-1	Source of Water Supply											
	(GIDC, Bore well, Surface water, Tanker supply etc)											
	Cto	tuo of p		an frame th			. w:4. ,					
	Sia	ius oi pe				n autro	лцу.					
	wa	ter perr	nission	letter is	attached	as ann	iexure i	in form-1.				
D-2	Wa	ter con	sumpti	on (KLD)								
	S	Parti	As	Actua	Propo	Tota	Rema	rks				
	N	rs	Con	Water	Water	after						
	0		sent	Requi	Requi	Ехр						
			AW	reme	reme	ansi						
			H-	nt	nt	on						
			600Z			KLD						
	1	Dom esti	3.00	1	2	3.00	In exis Manpo	sting, only 1 K ower:-10 Nos)	LD (Existing water is			
		C					require Unit i water	ed for domesi is already hav consumption pe	tic purpose ving 3 KLD ermission for			
							expan KLD v	sion unit will re water for dome	equire only 3			
							(Manp	ower:-15 nos).	So no need			
							to tak	e extra water i v	for domestic			
	2	Gar	0.0		1.5	1.5	Fresh	,. Water:- 1.5 KL[)			
		deni										
	3	ng	I	<u> </u>	l	NDUST	RIAL					
		Proc	12	12	61	73	As pe	er consent, un	it is having			
		ess		(Fresh	(Fresh		permis	ssion to use 12	2 KLD fresh			
				:- 0.3 	32.1 + Recvic		water	ior ine m ss Unit is usi	na only 63			
				Recvc	led :-		KLD F	Fresh and 5.7 k	LD recvcled			
				led:-	28.3)		water.					
				5.7)			After	proposed exp	ansion tota			
							water	requirement wil	I be 73 KLD			
				1			υπιτιν	viii use 39 KLD	nesn wate			
							and '	34 KID interr	al recycled			
							and 3 water.	34 KLD interr	nal recycleo			
		was	2.00	2.00	1	3	and 3 water. Fresh	34 KLD interr water:- 3 KLD	nal recycled			

	Boile 1	.5 0	.5 2.	2 2.7	Fresh water:- use 2 KLD live	2.7 KLD (Unit wil steam)	
	Cool 1 ing	.1 0	.6 3.	4 4	Fresh water:- 4 KLD		
	Othe r	Othe r		8 0.8	Unit will use 0.5 KLD Boiler Blow Down water for Water scrubber of Boiler. From scrubber 0.2 KL water will be getting evaporated		
					scrubber solut	ion will be used for	
	Indu 10 stria	6.6 1	5.1 68	.4 83.5	48.7 KLD Fr	^{,.} esh + 34.8 Recycle	
	l Tota						
	Gra 19 nd Tota	9.6 16	5.1 71	.9 88	53.2 KLD Fre	sh + 34.8 Recycle	
	(1+2 +3)						
wa	ste water (generati	on (KLD)				
S	Particul	As	Actual	Proposed	Total	Remarks	
S r N o	Particul ars	As per Cons ent AWH -	Actual Waste Water Gener ation	Proposed Waste water Generatio n KL/Day	Total Waste Water Generatio n after expansio	Remarks	
S r N o	Particul ars	As per Cons ent AWH - 6682 6	Actual Waste Water Gener ation	Proposed Waste water Generatio n KL/Day	Total Waste Water Generatio n after expansio n KL/Day	Remarks	
S r N o 1	Particul ars DOMES TIC INDUST	As per Cons ent AWH - 6682 6 3.0	Actual Waste Water Gener ation	Proposed Waste water Generatio n KL/Day 2.00	Total Waste Water Generatio n after expansio n KL/Day 3	Remarks Send to the ETP.	
S r N o	Particul ars DOMES TIC INDUST RIAL Process	As per Cons ent AWH - 6682 6 3.0 7.5	Actual Waste Water Gener ation 1.00 1.00 1.00 (Intern al Recycl ed:- 5.7 + Efflue nt:- 4.3)	Proposed Waste water Generatio n KL/Day 2.00 45.5 (Internal Recycled: 28.3 + Effluent:- 20.2)	Total Waste Water Generatio n after expansio n KL/Day 3 55.5	Remarks Send to the ETP. Internal Recycled:- 34 Effluent: - 21. KLD subjected to ETP.	
S r N o 1 2	Particul ars DOMES TIC INDUST RIAL Process	As per Cons ent AWH - 6682 6 3.0 7.5 7.5	Actual Waste Water Gener ation 1.00 1.00 (Intern al Recycl ed:- 5.7 + Efflue nt:- 4.3) 2.00	Proposed Waste water Generatio n KL/Day 2.00 45.5 (Internal Recycled: 28.3 + Effluent:- 20.2) 1.0	Total Waste Water Generatio n after expansio n KL/Day 3 55.5 -	Remarks Send to the ETP. Internal Recycled:- 34 Effluent: - 21.5 KLD subjected to ETP. 3 KLD washing effluent Subjected to ETP.	

	Cooling	0.2	0.1	0.0	1	1 KID Cooling
	Cooling	0.2	0.1	0.9		tower blow down
						will be subjected
	Comulation		0.00	0.0	0.0	to ETP.
	Scrubbe		0.00	0.3	0.3	0.3 KLI
						Scrubber solutio
						will be used for
						ash quenching.
	TOTAL	10	12.2	51.1	60.3	Internal
	INDUST					Recycled:- 34.
	RIAL					KLD
						Effluent:- 28.
	ΤΟΤΑΙ	13	12.2	53.1	63.3	KLU Effluent internall
	(DOME	15	13.2	55.1	05.5	
	STIC +					
	INDUST					KLD
	RIAL)					Effluent subjecte
						to ETP :- 28.
						KLD
						Total 0.2 KL
						effluent will b
						going along wit
						sludge.
						So total 28.3 KI
						effluent will b
						subjected to M/
						PETL.
Brief No	e on worst case	scenari	o for was	ste water gen	eration(Qua	litative and
Quantita	tive):					
Brief jus	tification in cas	e of no	process	effluent gen	eration or n	o industrial efflue
generati	on or no high	concer	ntration	effluent gene	eration from	n proposed proje
Whiche	ver is applicable).				
> N	ot Applicable					
)-4	Mode of Dispos	al & Fina	al meeting	g point (Existir	ng and Prop	osed)
Existing	and Proposed					
Domest	c: Send to the	ETP.				
Industri	I: Unitwillneu	tralize28	3.5KLDW	ater,Afterachi	evingthenor	ms28.3KLD water
	send to PE	TL, Gen	erated sl	udge 0.2 KLC	send to slu	dge drying bed, in
	which 0.4 k	KLD will	be evapo	oration loss &	0.16 MT/D g	enerated ETP
	sludge will	be send	l to TSDF	site		
Clearly m	ention about fina	l disposa	ıl			
CETP of	M/s. PETL.Pand	oli				
	,					





Si Ne	D.	Stack A To	Attached	Stack Heig ht (m)	Quanti Fuel	ty of	АРСМ	Type of Emissio n	Permiss ble Limit
A	S PE	R Existi	ng CCA N	o:-AWH	-104589				
	1.	Boiler 600 KG/Hr		11	11 Agro Waste/Brique			PM SO ₂	120 mg/Nm ³
	2.	Hot Air Genera (50,000	tor Kcal/Hr)	11	tte			NO _X	40 ppm
Α	FTE	R PROP	OSED EXI	PANSIO	N				
1.		Boiler 600 Kg/	′Hr	22	Agro Waste/ tte (20 MT/Mor	Brique nth)	Bag Filter + Water Scrubber		
	2	Hot Air Genera Dryer)	tor (Tray	22	Agro Waste/ tte (10 MT/Mor	Brique nth)	Bag Filter + Water Scrubber	PM SO ₂ NO _X	M 120 D ₂ mg/Nm ⁶ D _x 80 ppm
	3	Hot Air Genera SFD (2,00,00 Kcal/Hr	tor for)0)	22	2 Natural Gas (25 Nm³/Hr.)		Adequate stack height		40 ppm
	4	D.G.Se ⁻ (50 KV/	t A)	12	Diesel (15 Lit/	Hr.)	Acoustic Enclosure		
E-3 Exist As p	ing a per E	Proces & Propos Existing	s gas i.e. sed CCA No.: /	Гуре of р AWH-10	oollutant (4589	gases (\$	SO _{2,} HCI, NF	I _{3,} CI _{2,} NO _x e	etc.)
Sr. No	AP att to	CM ached	Stack Height	APC	M	Polluta	ant	Permiss	sible Limit
No e	existi	ng proce	ss gas emi	ission.					
Afte	r Pro	oposed	Expansion						
1	Sp Fla Dry	in Ish /er	22	Bag Filte	r	PM		120 mg/	Nm³
Note:	De	etails of g	gaseous ra	aw mate	erials use	ed in pr (Produ	oposed pro	ject	
(P	roduct	wise and Total))						
--	----------	---	------------------------	---	--	--	--	--	
> Ye	early ge	neration of all l	bleed liquors (M	T/KL per Annum) as mentioned above					
and its sound management in HW matrix.E-4Fugitive emission details with its mitigation measures.									
E-4	Fugit	Fugitive emission details with its mitigation measures.							
	Sr.	Source	Probable	Control Measures/ APCM					
	No		Pollutant						
			Emission						
		I	FUGITIV	EEMISSION					
	1	Handling of	Air pollutant	i) Provision of exhaust ventilation					
		raw material	(PM)	ii) Provision of PPE.					
		bags in		iii) Provision of Job rotation to reduce					
		storage area		exposure.					
	2	Solid raw	Air pollutant	Hopper will be provided with powder					
		material	(PM)	transfer system.					
		transferring							
		to reactor							
	3	Solvent	Air Pollutant	i) Solvent recovery system with					
		Recovery	(VOC)	steam condensation system.					
		System		ii) Pump & motors are mechanical					
				seal type.					
	4	Solvent	Air Pollutant	i) Carry out workplace area					
		storage Area	(VOC)	monitoring to find out concentration					
				level in ambient air close handling					
				system.					
	5	Flange joints	Air pollutant	i) Routine &periodic inspection to					
		pump & motors	(100)	ii) Preventive maintenance, Follow SOP for maintenance.					
				iii) Pumps & motors will be mechanical seal type					
				iv) LDAR program will be followed.					
	6		Air pollutost	Provision of Flange guard.					
	р В	material transferring to reactor	(VOC)	carried out by closed pipeline and mechanical seal pump.					
	7	Loading /unloading at	Air pollutant (VOC)	Unloading through pipeline to tank i a close system.					

F		Hazardous	waste						
		(As per the I	Hazardous a	and Other	Wastes	s (Manage	ement ar	nd Trar	nsboundary
		Movement) Rules 2016.							
		Note:							
		> Prio	ities for H	N Manag	ement:	Pre-proce	essing, C	o-Pro	cessing,
		Reus	e/Recycle	within pre	mises, S	Sell out to	actual u	sers h	aving Rule-9
		perm	ission, TSD	F/CHWIF	١.				
		> Quai	ntification	of hazard	ous wa	ste shall	be base	d on r	mass balance
		and	calculation	s shall b	e incorp	porated in	n EMP d	etails	separately.
		≻ Disp	osal to scr	ap vendo	ors/vend	dors/trade	ers is no	ot allo	wed
F-1		Hazardous	waste mar	nagemen	t matrix	(
Exis	ting &	Proposed							
Sr	Nam	e of	Source	Categ	Quant	tity/ Annu	ım		Manageme
•	Haza	rdous	of	ory	Δ٩	Actual	Pron	Tot	nt of HW
n	wast	е	generat		ner	Gener	osed	al	
о.			ion		Con	ation	USCU	ai	
					sont	ation			
					-				
					ΔWH				
					1045				
					89				
1.	ETP	Waste	From	26.2	60 MT	22 MT	38	60	Collection,
			plant				MT	MT	Transportati
									on and
									TSDF
2		Oil	From	51	0.06	0.06	0.44	0.5	M/s.BEIL.
۷.			Lubricati	J. I	KL.	0.00	0.44 KI	0.5 N	Storage 8
			on					r\∟	Reused
									premises.
3.	Empt	y la/aantainara	From	33.3	19.2	19.24	0.76	20	Collection,
	/liner	s containers	Material		4 111	МТ	MT	MT	Decontamin
	conta	minated							ation &
	chem	iicals/wastes							
4.	Reco	verable	Generat	28.6	0	15 MT	1040	10 55	Collection,
	SOIVE	;i i l						DD MT	Transportati

		BLUE						on & recover and reus internally.
5. S A	Spent Sulphurio	c Gene ed fro CPC Alpha Blue	nrat B15 om	1260 MT	1032 MT	5160 MT	61 92 MT	Collection, Storage, Transportation & sell end ust having Rule 9 Permission
- E_2	Mombors	hin dotails						
1 -2	(For HW	managem	(1 , 1)		-			
Dotaile	of Momborshi		8 Data wi	th spara as	nacity of t	ha Cam	mon F	acility
Details								aciiity.
					e in iorm-	•1.		
F-3	Details of	Non-Haza	ardous was	ste & its dis	posal			
	(MSW an	d others)						
Sr.	Name of No	on- (Quantity	Handlin	ng/ Dispos	al		
1 1	Wood Wast	waste 1 e 2	<u>vi i / Annum</u> 2	Given t	o authoriz	ed scrar	deale	ers
2	Glass Wast	e í	1 Given to authorized scrap dealers					ers
3	Paper wast	e (0.5 Given to authorized scrap dealers				ers	
1								
4	Fly Ash	3	3	Given t	o authoriz	ed scrap	deale	ers
4	Fly Ash		3	Given t	o authoriz	ed scrap	deale	ers
G G	Solvent	managem	ant, VOC e	Given t	o authoriz etc.	ed scrap	deale	Prs
G G-1	Fly Ash Solvent I Brief Note	managem e on types	3 ent, VOC e of solvents	Given t emissions e s, Details o	o authoriz etc. f Solvent r	ed scrap	deale	covery, reuse
G G-1	Fly Ash Solvent i Brief Note of recove	managem e on types red Solver	3 ent, VOC e of solvents nts etc.	Given t emissions e s, Details o	o authoriz etc. f Solvent r	ed scrap	o deale	covery, reuse
4 G G-1 Sr N o	Fly Ash Solvent i Brief Note of recove Name of Represent ative Product	manageme e on types red Solver Nam e of Solv e nt used	ant, VOC e of solvents of solv	Given t emissions e s, Details o Solven t Quantit y used in ton per ton of produ c t	o authoriz etc. f Solvent r f Solvent r recov e r Quant ity in Ton perto n of	ecovery ecovery Sol Red r edC tity MT/ t h	vent vent cove Quan in Mon	Percen tageRe covery
G G-1 Sr N o 1.	Fly Ash Solvent i Brief Note of recove Name of Represent ative Product Phthalocy ani ne Beta Blue	manageme e on types red Solver Nam e of Solv e nt used Xyle ne IBA	ant, VOC e of solvents of solv	Given t emissions e s, Details o Solven t Quantit y used in ton per ton of produ c t 1.52	o authoriz etc. f Solvent r f Solvent r n t recov e r Quant ity in Ton perto n of	ecovery ecovery Sol Red r edC tity MT/ t h	vent vent cove Quan in /Mon 7.88	Percen tageRe covery 96%
G G-1 Sr N o 1. G-2	Fly Ash Solvent i Brief Note of recove Name of Represent ative Product Phthalocy ani ne Beta Blue Brief Note	manageme e on types red Solver Nam e of Solv e nt used Xyle ne IBA	ant, VOC e of solvents nts etc. Produ ct Quanti ty in MT/Mo n th 6 0 R propose	Given t emissions e s, Details o Solven t Quantit y used in ton per ton of produ c t 1.52	o authoriz etc. f Solvent r f Solvent r recov e r Quant ity in Ton perto n of 1.46	ed scrap ecovery Sol Red r edC tity MT/ t h	vent vent cove Quan in /Mon 7.88	Percen tageRe covery 96%
G G-1 Sr N o 1. G-2	Fly Ash Solvent i Brief Note of recove Name of Represent ative Product Phthalocy ani ne Beta Blue Brief Note Leak Detection	manageme e on types red Solver Nam e of Solv e nt used Xyle ne IBA ie on LDA	a ent, VOC e of solvents nts etc. Produ ct Quanti ty in MT/Mo n th 6 0 R propose pair (LDAF	Given t emissions e s, Details o Solven t Quantit y used in ton per ton of produ c t 1.52	o authoriz etc. f Solvent r f Solvent r f Solvent r recov e r Quant ity in Ton perto n of 1.46	ecovery ecovery Sol Rec r edC tity MT/ t h 8 emented	vent vent cove Quan in /Mon 7.88	Percen tageRe covery 96%
G G-1 Sr N o 1. G-2	Fly Ash Solvent i Brief Note of recove Name of Represent ative Product Phthalocy ani ne Beta Blue Brief Note Leak Detection	manageme e on types red Solver Nam e of Solv e nt used Xyle ne IBA ise on LDA	a ent, VOC e of solvents nts etc. Produ ct Quanti ty in MT/Mo n th 6 0 R propose pair (LDAF	Given t emissions e s, Details o Solven t Quantit y used in ton per ton of produ c t 1.52 ed: R) is a proc	o authoriz etc. f Solvent r f Solvent r recov e r Quant ity in Ton perto n of 1.46	ecovery ecovery Sol Red r edC tity MT/ t h 8	vent vent cove Quan in /Mon 7.88	Percen tageRe covery 96%

	nt.in addition to control rugitive emissions, LDAR Program also helps the							
i	industries to reduce unwantedlossesofchemicalsandtherebyconservingenergy&increasingtheirprofit							
ι								
i	ility.							
G-3		VOC emission sources	and its mitigatior	n measures				
> F	Prov	rision of mechanical se	al inpump.					
> F	Reg	ular inspection of tank	roofseals.					
	Adeo	quatemeasuresforthem	inimization/preve	entionofthefugitiv	eemission.			
> F	Reg	ularmaintenanceofvalvo	es,pumpsandoth	erequipmenttopi	reventleakage.			
> E	Entir	eprocesstobecarriedou	utintheclosedread	ctorwithproperma	aintenanceof			
t	emp	perature.						
> F	Reg	ularperiodicmonitoringo	ofworkareatochee	ckthefugitiveemi	ssion.			
	٩de	quatestackheightsaspe	rtheGPCBestima	ationwillbeprovid	esatalllocations f			
r	edu	ce GLCs ofpollutants.						
r > A	edu Air F	ce GLCs ofpollutants. Pollution Control Syster	n will be installed	l in theplant.				
r > /	edu Air F	ce GLCs ofpollutants. Pollution Control Syster	n will be installed	l in theplant.				
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r > / H H-1	edu Air F	ce GLCs ofpollutants. Pollution Control Syster SAFETY details Details regarding store	n will be installed age of Hazardou	l in theplant.				
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r > / H H-1	edu Air F	ce GLCs ofpollutants. Pollution Control Syster SAFETY details Details regarding store (For tank storages onl	n will be installed age of Hazardou y including sper	l in theplant. s chemicals nt acid and spen	t solvent tanks)			
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r ≻ / H H-1 - Sr.r		ce GLCs ofpollutants. Pollution Control Syster SAFETY details Details regarding stora (For tank storages onl Name of Chemical	n will be installed age of Hazardou y including sper Capacity of Tank	d in theplant. s chemicals nt acid and spen Number of Tanks	t solvent tanks) Hazardous Characterist			
r ≻ / H H-1 - Sr.r	redu Air F	ce GLCs ofpollutants. Pollution Control Syster SAFETY details Details regarding stora (For tank storages onl Name of Chemical	n will be installed age of Hazardou y including sper Capacity of Tank	d in theplant. s chemicals nt acid and spen Number of Tanks	t solvent tanks Hazardous Characterist cs of			
r > / H H-1 - Sr.r	redu Air F	ce GLCs ofpollutants. Pollution Control Syster SAFETY details Details regarding stora (For tank storages onl Name of Chemical	n will be installed age of Hazardou y including sper Capacity of Tank	d in theplant. s chemicals nt acid and spen Number of Tanks	t solvent tanks Hazardous Characterist cs of Chemical			
r > / H H-1 - Sr.r	redu Air F	ce GLCs ofpollutants. Pollution Control Syster SAFETY details Details regarding stora (For tank storages onl Name of Chemical Sulphuric Acid	n will be installed age of Hazardou y including sper Capacity of Tank 15 KL	d in theplant. s chemicals nt acid and spen Number of Tanks 1	t solvent tanks Hazardous Characterist cs of Chemical Corrosive &			

Brief note on storage of Hazardous chemicals in Tanks

Brief note on storage of Hazardous chemicals other than Tanks i.e. Drum, Barrels,

Carboys, Bags etc.

MOC of drum will be as per compatibility of chemical and drum materials. Unit will provideflameproofelectricalfittingasandfirefightingmeasurestoeliminatefire as well as other hazard. Spillage kit will be available at requirearea.

Safety details of Hazardous Chemicals:

Type of	Safety measures
Hazardous	
Chemicals	
Flammable	Storage in compatible storage unit with flame proof fitting, also provide
	firefighting measures. Only trained person allowed to handle
Toxic	Storage in compatible storage unit with safe distance with other
	chemicals, Only trained person allowed to handle
Acid	Storage material will be as per compatibility class. Trained person will
	handle that.
Corrosive	Storage in compatible storage unit with safe distance with other
	chemicals, Only trained person allowed to handle

> Applicability of PESO :

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H-2	Types of hazardous Processes involved and its safety measures:
	(Hydrogenation process, Nitration process, Chlorination process,
	Exothermic Reaction etc.)

- - There will be no any hazardous processes involved.

Type of Process		Safety measures including Automation
H-3	Details of Fire Load Calculation	

Total Plot Area:	1575
Area utilized for plant activity:	548.62
Area utilized for Hazardous Chemicals	44.70
Storage:	
Number of Floors:	Only Groun Floor
Water requirement for firefighting in KLD :	4.0
Water storage tank provided for firefighting in	200 KL
KLD:	
Details of Hydrant Pumps:	Diesel pum
Nearest Fire Station :	1.3 km Pan Fire station

H-5	Details of Occupational Health Centre (O	HC).	
I J			
-	Number of newspapert Freedowses		
	Number of permanent Employee :	20 Nos.	
	Number of Contractual person/Labour :	5 Nos.	
	Area provided for OHC:	15	
	Number of First Aid Boxes :	2 Nos.	
	Nearest General Hospital :	3 KM	
	Name of Antidotes to be store in plant :	Folinic acid	
		(Leucovorin),	
		B nzocaine	
		(Novocaine)	
		solution for eye,	
		Dexona,Avil	

- During meeting, Committee noted that PP presented prescribed format for B1 project in place of B2 project along with mentioning existing production plant. PP presented that unit was established based on NOC/CCA in 1995 (before EIA notification 2006). After that EC was granted in 2009, but due to moratorium guideline of critical zone for period unit was not able to convert in to CCA. Also, validity of EC is for 7 years. Validity of granted EC was completed in moratorium period, thus unit have to again apply for EC expansion and readdress ToR no-1.PP presented production details from year 2009 to 2020 and revised GIDC Notified area letter with mentioning for area provided for green belt area for PP is not allocated to another industry in future and details of how many trees planted in Proposed green belt area, along with Longitude and Latitude of proposed greenbelt area and its maintenance responsibility for green belt development. PP submitted baseline data along with incremental in GLC and each and every specific ToR compliance in tabular form.
- Committee found reply submitted by PP were satisfactory.

 After detailed discussion, Committee unanimously decided to recommend the project to SEIAA, Gujarat for grant of Environment Clearance with the following specific condition:

SPECIFIC CONDITIONS:

Project proponent (PP) shall install CEMS [Continuous Emission Monitoring System] in line to CPCB directions to all SPCB vide letter no. B-29016/04/06PCI-1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis. [For Small/Large/Medium (Red Category) &

Whichever (Air emission & Effluent discharge) is applicable]. <u>255th meeting of SEAC-Gujarat, Dated 05.08.2021</u>

- Close loop solvent recovery system with adequate condenser system shall be provided to recover solvent vapours in such a manner that recovery shall be maximum and recovered solvent shall be reused in the process within premises.
- 3. Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines. LDAR Logbooks shall be maintained.
- 4. The National Ambient Air Quality Emission Standards issued by the Ministry vide G. S. R. No. 826 (E) dated 16th November, 2009 shall be complied with.
- National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G. S. R. 608 (E) dated 21/07/2010 and amended from time to time shall be followed.
- 6. Unit shall have to adhere to the prevailing area specific policies of GPCB with respect to the discharge of pollutants, and shall carry out the project development in accordance & consistence with the same.
- 7. The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority.
- 8. All measures shall be taken to avoid soil and ground water contamination within premises.
- 9. GPCB shall ensure compliance of direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP and also that the pollution load is not increased in the CPA/SPA for the compliance of Hon'ble NGT order.

WATER

- Total water requirement for the project shall not exceed 88 KLD. Unit shall reuse 34.80 KLD of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 53.20 KLD and it shall be met through GIDC supply only. Prior permission from concerned authority shall be obtained for withdrawal of water.
- 2. The industrial effluent generation from the project shall not exceed 60.30 KLD after expansion.
- Industrial effluent shall be segregated into two streams (1) High COD and TDS effluent (2) Low COD and TDS effluent and it shall be managed as below.

• High COD and TDS effluent (25.50 KLD)

25.50 KLD, High COD and TDS effluent from process, washing and utility shall be treated in ETP consists of Primary treatment units. Then treated effluent shall be sent to CETP of M/s PETL for further treatment and disposal.

• Low COD and TDS effluent (34.50 KLD):

- 34 KLD, Low COD effluent from process shall be directly reused back in next batch and 0.5 KLD, boiler blow down shall reused for scruber make up and ultimatlt disposal for boiler ash quenching within premises.
- 4. Unit shall discharge wastewater to CETP of GIDC Panoli, PETL only after complying with inlet norms

prescribed by GPCB and ensuring content of effluent for COD/VOC so as not to get air borne during evaporation in order to achieve no adverse impacts on Environment and Human Health.

- Domestic wastewater generation shall not exceed 3 KL/day for proposed project and it shall be treated in ETP. It shall not be disposed off through soak pit/ septic tank.
 - <u>AIR</u>
- Unit shall not exceed fuel consumption and provide APCM and Stack height as mentioned in flue gas matrix.
- 7. Unit shall provide APCM and stack height as mentioned in process gas matrix.
- 8. PP shall use approved fuels only as fuel in boilers.

HAZARDOUS & SOLID WASTE

- 1. All hazardous solid waste shall be managed as mentioned in hazardous waste matrix.
- 2. The unit shall submit the list of authorized end users of hazardous wastes along with MoU signed with them at least two months in advance prior to the commencement of production. In the absence of potential buyers of these items, the unit shall restrict the production of the respective items.

GREENBELT AREA

3. The PP shall develop green belt within premises (388 sq. Meter within premises and 300 sq. Meter outside premises i.e. 688 Sq m i.e. 43.68 % of the total plot area) as per the undertaking submitted before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.

10. Safety & Health:

- a) PP shall obtain PESO permission for the storage and handling of hazardous chemicals.
- b) PP shall provide Occupational Health Centre (OHC) as per the provisions under the Gujarat Factories Rule 68-U.
- c) PP shall obtain fire safety certificate / Fire No-Objection certificate (NOC) from the concern authority as per the prevailing Rules / Gujarat Fire Prevention and Life Safety Measures Act, 2016.
- d) Unit shall adopt functional operations/process automation system including emergency response to eliminate risk associated with the hazardous processes.
- e) PP shall carry out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in the manufacturing area in case of any emergency or accident.
- f) PP shall install adequate fire hydrant system with foam trolley attachment within premises and separate storage of water for the same shall be ensured by PP.
- g) PP shall take all the necessary steps for control of storage hazards within premises ensuring incompatibility of storage raw material and ensure the storage keeping safe distance as per the <u>255th meeting of SEAC-Gujarat, Dated 05.08.2021</u>

prevailing guidelines of the concerned authority.

- PP shall take all the necessary steps for human safety within premises to ensure that no any harm is caused to any worker/employee or labor within premises.
- i) Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.
- j) Unit shall provide effective fire hydrants, water monitors & foam application system at solvent storage area and unit shall provide adequate safety system such as water sprinklers, water curtains, foam pouring system etc. to restrict cascade fire emergency in solvent storage area.

4.	SIA/GJ/IND2/61039/2007	M/s. Shyam Dye Chem	EC-Reconsideration
		Plot no:-6919 & 6901, GIDC Estate, Ankleshwar, Taluka- Ankleshwar, District Bharuch	

Category of the unit: 5(f)

Project status: Expansion

- Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/61039/2007 on dated 22.02.2021 for obtaining Environmental Clearance.
- SEIAA issued TOR to PP vide letter dated 30/07/2019.
- Project proponent has submitted EIA Report prepared by M/s. Jyoti Om Chemical Research Centre Pvt. Ltd based on the TOR issued by SEIAA.
- This is an existing unit and now proposes for expansion of Synthetic Organic Chemicals plant as below,

Sr.	Products	CAS/CI	Quantity			End User
No.		No.	MT/MONTH			
			As per	Proposed	Total	
			Existing		After	
			CCA		Expansion	
1.	Solvent Dyes		3	97	100	Utilized to color
	(Azo Group)					candles and waxes,
1.1	Solvent Brown 1	11285				ink and inkjets,
1.2	Solvent Yellow 72	127450				coatings, and a
1.3	Solvent Oil	2646-17				variety of other
	Orange					non-polar,
1.4	Solvent Oil Red-	85-83-6	Either/	Either/ Or	Either/ Or	hydrocarbon based
	24		Or			materials.
1.5	Solvent Oil Red-	85-86-9				
	23					
1.5	Solvent Violet-13	81-48-1				
1.6	Solvent Red-111	82-38-2				
1.7	Solvent Red-18	6483-64-3				

1.8	Solvent Green-3	128-80-3				
1.9	Solvent Blue-36	14233-37-				
1.10	Solvent Blue-35	17354-14-				
1.11	Solvent Brown-41	1052-38-6				
1.12	Solvent Red-1	1229-55-6				
1.13	Solvent Yellow-2	60-11-7				
2.	Azo Pigment (Organic Yellow Pigment)		0	100 Either / Or	Plastics, Textile, Wool, Silk, Cotton Linen, Printing Ink	
2.1	Pigment Yelow-1	11680			Food, Paints	
2.2	Pigment Yelow-3	11710				
2.3	Pigment Yelow-2	6486-26-6				
2.4	Pigment Orange- 14	6837-37-2				
2.5	Pigment Rubin Toner	5281-04-9				
2.6	Pigment Red - 53:1	5160-02-1				
2.7	Pigment Red - 60:1	17418-58- 5				
2.8	Pigment Red - 2	6041-94-7				
2.9	Pigment Red - 3	2425-85-6				
2.10	Pigment Red - 4	2814-77-9				
2.11	Pigment Red - 8	6410-30-6				
2.12	Pigment Red - 12	6410-32-8				
2.13	Pigment Red - 31	6448-96-0				
2.14	Pigment Red - 32	6410-29-3				
2.15	Pigment Red - 48	7023-61-2				
2.16	Pigment Red - 53	2092-56-0				
2.17	Pigment Red - 57	5281-04-9				
2.18	Pigment Red - 112	6535-46-2				
2.19	Pigment Red - 210	61932-63- 6				
2.20	Pigment Yellow - 14	5468-75-7				
2.21	Pigment Yellow - 65	6528-34-3				

	2.22	Pigment Yellow – 12	6358-85-6					
_	2.23	Pigment Yellow - 17	4531-49-1					
-	2.24	Pigment Yellow - 13	5102-83-0					
-	2.25	Pigment Yellow - 74	6358-31-2					
-	2.26	Pigment Yellow - 83	5567-15-7					
-	3.	Basic Dyes		0	100	-	pulp and paper,	
-	3.1	Bismark Brown	21000		Either/ Or		alumina, soap and	
_	3.2	Basic Brown- 1	10114-58- 6				detergents, petroleum products	
	3.3	Basic Orange- 2	532-82-1				production	
-	3.4	Basic Violet- 16	6359-49-1					
-	3.5	Basic Green- 4	2437-29-8					
-	3.6	Basic Blue- 9	7220-79-3					
-	3.7	Basic Crysoline	10114-58- 6					
F	4	Acid Dyes		3	97		Dyeing protein	
_	4.1	Acid Orange-II	15510				fibers	
	4.2	Acid Scarlet-3R	10385	Either/ Or	Either/ Or			
	4.3	Acid Blue-7	3486-30-4					
-	4.4	Acid Blue-1	3844-45-9					
	4.5	Acid Violet - 49	1694-09-3					
	4.6	Acid Blue - 113	3351-05-1					
F	4.7	Acid Red – 52	3520-42-1					
	4.8	Acid Blue - 3	20262-76- 4					
	4.9	Acid Blue – 194	93050-78- 3					

<i>A</i> 10	Acid Blue 110	1324_80_7		· · · · · · · · · · · · · · · · · · ·		
4.10	Acia Blue – 119	1324-00-7				
4.11	Acid Yellow – 42	5850-35-1				
4.12	Acid Brown -55	5858-51-5				
4.13	Acid Yellow – 11	6359-82-6				
4.14	Acid Red – 88	6359-82-6				
4.15	Acid Yellow – 36	587-98-4				
4.16	Acid Brown – 14	5850-16-8				
4.17	Acid Yellow – 113	3351-05-1				
4.18	Acid Yellow - 49	12239-15- 5				
5	Reactive Dyes		3	97		Dyeing of
5.1	Remazole Black	20505	Fither/	Fither/ Or		cellulose like
5.2	Remazole Orange	17757	Or			
5.3	Reactive Golden Yellow					
5.4	Reactive Red	70210-20- 7				
6.	Azo Intermediate		3	97		Cotton, fabric
6.1	Fast Garnet GBC					printing and
	Total		3	07	100	

• The project falls under B1 category of project activity 5(f) as per the schedule of EIA Notification 2006.

- PP was called for Video conference meeting for presentation on dated 25.05.2021.
- During the SEAC Video conference meeting dated 25.05.2021, Project Proponent (PP) and their technical expert and EIA consultant from M/s. Jyoti Om Chemical Research Centre Pvt. Ltd remain present and made technical presentation before the Committee.
- During the meeting, the project was appraised based on the information furnished in the EIA Report and details presented during the meeting.
- The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted <u>255th meeting of SEAC-Gujarat, Dated 05.08.2021</u>

for the study area of 10 km radial distance from project site for the period March 2018 to May 2018. Ambient Air Quality monitoring was carried out for PM₁₀, PM_{2.5}, SO₂, NOx, CO, HC and VOCs at Eight locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using "AERMOD". The resultant concentrations are within the NAAQS. The modeling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).

- Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios
 has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan
 has been covered in the RA report.
- Upon asking regarding QCI/NABET accreditation for preparation of EIA preparation for proposed project, technical expert of PP informed that they have applied for QCI/NABET accreditation for preparation of EIA/EMP report as per the amended EIA Notification vide S.O. 648 (E) Dated 03.03.2016 and is under process.
- This is an existing unit and now applied for expansion of project proposed for manufacturing of synthetic organic chemicals at GIDC Ankleshwar. Committee asked for status of existing unit, technical expert of PP informed that they have obtained CCA of existing plant before year 2006 and also obtained EC for expansion project in 2007 but due to critically polluted area Moratorium by MoEF & CC for GIDC Panoli area, unit has not converted into CTE and CCA. Hence Committee asked clarification regarding status of production plant and reason for not converting EC obtained in year 2008 and till date not converted it into CCA. Technical expert of PP informed that they have not converted EC of year 2008 due to GIDC Panoli declared as Critical polluted area in year 2009 and unit has not started expansion project till date and having CCA for existing plant. Also PP has informed that EC was expired for expansion project and again GIDC Ankleshwar falls in CEPI area as per MoEF & CC Moratorium in year of 2017 and again obtained ToR from SEIAA for expansion project in Year 2019. After detailed discussion, Committee insisted for Chronolgy of proposed project from Commissioning of existing plant and existing plant CTE and CCA from GPCB obtained before year 2006 to till date applied for expansion project and authenticated documents regarding production data from Year 2009 to till date as EC for same expansion project obtained by PP in year of 2007.
- Committee noted that PP has addressed existing plant valid CCA and two Show Cause Notice (SCN) issued by GPCB and its compliance reply submitted by PP at GPCB. PP submitted undertaking showing that there is no legal court case and public complaint against unit.Product profile with its end-use is discussed in depth. Source of water supply is GIDC. Committee noted that PP has addressed area adequacy with layout plan for proposed project site.Looking to expansion project in same plant premises area, Committee insisted for readdress specific ToR no-1 precisely with each and every points in specific ToR no-1 regarding area adequacy for expansion plant along with clarification regarding area adequacy for proposed expansion project for expansion of existing production from 3 MT/Month to 100 MT/Month in same existing plot area with existing and proposed plant machinery, reaction vessels provided for proposed project with details 255th meeting of SEAC-Gujarat, Dated 05.08.2021

regarding reactor capacity and reaction time for proposed product, Raw material and finished goods storage area adequacy for proposed and existing plant in tabular form, utility,ETP area, green belt area, peripheral road etc.

- Committee deliberated on Process safety, area adequacy and layout plan, Fire safety, water balance & waste water management, Flue gas and process gas emission & Air Pollution Control System, Hazardous waste matrix, EMP, CER, LDAR and solvent recovery, Green belt, Risk assessment, baseline data etc.Looking to Green belt area outside premises letter of GIDC Notified area, Committee insisted for submission of revised GIDC Notified area letter with mentioning for area provided for green belt area for PP is not allocated to another industry in future and details of How many trees planted in Proposed green belt area , along with Longitude and Lattitude of proposed greenbelt area and its maintenance responsibility for green belt development. Also PP has not presented adequately details regarding baseline data with mentioning incremental ground level concentration due to proposed project, Remedial measures for exceeding parameters under Water, Air and Soil parameters of baseline data and also not submitted its details as per prescribed B1 project format by technical expert of PP.
- Committee noted the following:
 - PP has proposed total industrial effluent, after expansion will be treated in ETP and then will be sent to CETP of ETL, Ankleshwar for expansion project.PP presented permission letter from GPCB for additional waste water discharge to CETP of ETL.
 - ✓ Domestic effluent will be treated in ETP along with industrial effluent.
 - ✓ Natural gas as fuel for Boiler and hot air generator.
 - ✓ There is no process gas emission.
 - ✓ Exhausted scrubbing media will be selling out as per the HW Rules.
 - ✓ PP submitted hazardous waste matrix mentioning source of generation, quantity and Mode of disposal and committed to comply the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules 2016.
- Looking to ToR submitted by PP found inadequate as specific ToR regarding LDAR and solvent recovery, specific Tor regarding renewable energy found inadequate details for provision of solar energy for proposed project, Hence Committee insisted for submission of revised ToR compliance report for ToR obtained by PP in year 2019 for proposed project with mentioning each and every specific ToR accorded by SEIAA adequately and precisely with technical details.
- After detailed discussion, Committee unanimously decided to consider the project in one of upcoming meeting after submission of following documents,
 - Prescribed format for B1 project in place of B2 project along with mentioning existing production plant details for proposed project.
 - Clarification regarding status of production plant since EC obtained and reason for not converting EC obtained in year 2007 till date it into CCA and again applied for expansion project of EC for same expansion project in year of 2021..

- 3. Readdress specific ToR no-1 precisely with each and every points in specific ToR no-1 regarding area adequacy for expansion plant along with clarification regarding area adequacy for proposed expansion project from 3 MT/Month to 100 MT/Month in same existing plot area and mentioning existing and proposed plant machinery, reaction vessels provided for proposed project with details regarding reactor capacity and reaction time for proposed product, Raw material and finished goods storage area adequacy for proposed and existing plant in tabular form, utility,ETP area, green belt area, peripheral road etc
- 4. Submit Chronolgy of proposed project from Commissioning of existing plant and existing plant CTE and CCA from GPCB obtained before year 2006 to till date applied for expansion project and authenticated documents regarding production data from Year 2009 to till date as EC for same expansion project obtained by PP in year of 2007.
- 5. Revised GIDC Notified area letter with mentioning for area provided for green belt area for PP is not allocated to another industry in future and details of how many trees planted in Proposed green belt area, along with Longitude and Lattitude of proposed greenbelt area and its maintenance responsibility for green belt development.
- 6. Adequate details regarding baseline data with mentioning incremental ground level concentration due to proposed project, Remedial measures for exceeding parameters under Water, Air and Soil parameters of baseline data in study area of proposed project which is submitted in EIA report for proposed project.
- Submission of revised ToR compliance report for ToR obtained by PP in year 2019 for proposed project with mentioning each and every specific ToR accorded by SEIAA adequately and precisely with technical details.
- PP submitted reply of above query generated on SEAC VC meeting dated 25/05/2021 through e-mail.
- This proposal is reconsidered in SEAC meeting dated **05.08.2021**. PP along with their technical expert/consultant, M/s. Jyoti Om Chemical Research Centre Pvt. Ltd remains present in the meeting and made presentation before Committee.
- PP submitted revised salient features of water, air and Hazardous waste management are as under,

Sr. no.	Particulars				Details				
A-1	Total cost of Propos	Total cost of Proposed Project							
	(Rs. in Crores):								
	Exi	sting	Proposed	Total		7			
	0.5	Crores	3.29Crores	3.79Cr	ores	-			
A-2	Details of Environm	ental Manag	gement Plan (EM	IP)	As belo	DW:			
Sr. No	Unit	Deta	Detail		Cost	Total Recurring Cost (Rs. In Crores)			
1	Waste Water	ETP	ETP & Send to ETL		95	2.0497			
2	Air		Scrubber	0.1	0	0.02			
3	Hazardous Management		A, Membership TSDF and Co essing of	0.0	2	0.00804			

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	Total		1.905	2.12064
9	CER Activity	Provide RO system and Street light	0.03	0.003
8	Automation	Automation for Sprinkler system and Reactors	0.10	0.0016
7.	Occupational Health		0.05	0.0001
6.	Green Belt Development	Plants, Tree Guard, Manure	0.01	0.01
5	AWH Monitoring	Auditing	0	0.01
4	Fire & Safety	Fire Extinguisher, Fire Hydrant Line , First Aid Kit, Smoke detector, Sprinkler System	0.30	0.0182
		Hazardous Waste & Disposal		

Summary

--

Cost of Project in Crores per Annum:	3.29
EMP Capital Cost in Crores per Annum and Percentage:	1.905 (58%)
EMP Recurring Cost in Crores per Annum and Percentage:	2.122 (64.49%)

A-3 Details of CER as per OM dated 01/05/2018 (In case of project falls under CPA/SPA, CER fund allocation to be at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental Clearance as per the mechanism published vide MoEF&CC's OM vide 31.10.2019.)

	% as per the OM	Rs. in Crores
l	1%	0.033

In case of more than % as per the OM, mention the same.

Brief n	ote o	n prop	osed activi	ties for CER:							
			CER A	CTIVITIES TO	BE DON	IE (AMOU	NT IN	I LAKH)			
	Sr.	Activ	itioo	Name of the V	illage /	Capital C	ost	Maintenar	ice Cost		
	No.	ACTIV	ities	Place		Year - 1		Year - 2 Year - 3		Total (Lakh)	
	1	Drinki	ing Water			2		0.08	0.08	0.40	
		facility	y and	PardimokhaGra	ampanc					2.16	
	2	Strea	t Light	hayat		1		0.07	0.07	1.14	
		Total		1		3		0.15	0.15	3.3	
В	La	and / F	Plot owner	ship details:							
	E	xpansi	on will be ı	mad in existing p	olot.						
B-1	P	lot are	а								
				Existing	Prop	oosed		Total			
			-	1607 97Sa m	0.5	a m	1607	7 97Sa m			
B-2	B	rief not		adequacy in lin		9. m. posed proj	ect a	ctivities:			
D-2			Init will pro	vide senarate s	torade a	rea for proj	duct	Raw materia	l Hazardo	us waste	
B-3	G	reen h	elt area		lorugo u		auot,				
80				Exist	ing	Proposed			Тс	Total	
						(Sq. meter) 95 es) (Out side Plant Premises)		(Sq. meter) 538.62			
			Area in	443.	62						
			Sq. mete	r (Inside Plant	Premise						
			% of total area	289	%	5.9% 33			33.	.9%	
	ln (L	case .at-Lor	of GREEN ng), Agree	I-BELT partly o ment/MoU with	utside p specifi	oremises, c area etc	give (complete de	etails like	exact loca	ation
С	E	mploy	ment gen	eration							
				Existinę	g	Propose	d	Total			
		6		10 16							
	In	case	of Indirec	t employment,	Give de	tails.		I			
D	W	ATER									
D-1	S	ource	of Water S	upply							
	(GIDC. E	Bore well	Surface water T	anker si	unnlu ata	`				
				Surface water, Tanker supply etc)							

> Water permission letter is attached as annexure in form-1.

D-2 Water consumption (KLD)

	Existing	Proposed	Total after	Remarks
	KLD	(Additional)K	Expansion	
		LD	KLD	
(A) Domestic	0.5	2.5	3	
(B) Gardening	1	1	2	
(C) Industrial				
Process	1.50	26.5	28	Fresh- 3 KLD
				Recycled – 25 KLD
Washing	2.5	1.5	4	
Boiler	0.5	1.5	2	
Cooling		20	20	Recycled Water- 20
				KLD
Others				
	4.5	49.5	54	
Industrial Total				
Grand Total	6	53	59	Fresh- 14 KLD
(A+B+C)				Recycled – 45 KLD

Waste water generation (KLD)

D-3

Category	Existing KLD	Proposed (Additional)	Total after Expansion	Remarks
(A) Domestic	0.5	2.5	3.0	Treated in to ETP
(B) Industrial				
Process	1.4	49.6	51	
Washing	2.5	1.5	4.0	
Boiler	0.1	0.9	1	
Cooling		3	3	
Others				
Total Industrial waste water	4.0	55	59	Treated in to ETP

Brief No	ote on worst o	case scenario for waste water generation(Qualitative and Quantitative):
Brief jus	stification in	case of no process effluent generation or no industrial effluent generation or no
high co	ncentration e	effluent generation from proposed project (Whichever is applicable).
> N	Not Applicable	2 · · · · · · · · · · · · · · · · · · ·
D-4	Mode of Dis	sposal & Final meeting point (Existing and Proposed)
Existing	g and Propos	sed
	Domestic:	Treatment into ETP
	Industrial:	13.3 KLD Send to ETL after treatment. And remaining effluent will pass for further treatment through RO & MEE and maintain ZLD for additional effluent.
Clearly r	mention about	t final disposal
CETP of	f M/s. ETL	
D-5	Treatment fa	acilities
ETP – 1	20 KLD (Prim	iary)
For Don	nestic waste	water:
Capacity	y of STP: N/	A
TDS etc propose Efflue	c.) In case of ed. nt from Plant a Sewage	f stream segregation, Separate ETP (ETP-1, ETP-2) for each stream shall be and Chemical PAC + Poly Dosing Tank electrolyte \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow
		RO Permeate collection tank MEE Condensate MEE followed by ATFD MEE Salt

Note: (In	case of CETP discharge):
Manage	ment of waste water keeping in view direction under section 18 (1) (b) of the Water
(Preven	tion and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP.
	Init will maintain Existing discharge its quantity and quality will not change. Thus Section 18(1)(b) will .
C	
Brief not	e on adequacy of ZLD (In case of Zero Liquid Discharge):
<u> </u>	
D-6	In case of Common facility (CF) i.e. CETP, Common Spray dryer, Common MEE, CHWIF etc.
	Name of Common facility (CF) (For waste water treatment)
	Membership of Common facility (CF) mentioning total capacity, consented quantity, occupied
	capacity and spare capacity and norms of acceptance of effluent from member units in-line with
	the direction given by GPCB vide Letter No. GPCB/P-1/8-G (5)/550706 dated 08/01/2020.
	Membership of Common Facility is attached as annexure in EIA. Simplified water balance diagram with rouse (recycle of water water (Existing and
0-7	Pronosed)
l 1 f	(Fresh- 14 KLD + Recycled-45 KLD)
	Process Boiler Washing Cooling Tower Domestic Gardening 28 KLD 2 KLD (Freeh) 4 KLD 20 KLD (Preeh) 2 KLD (Freeh) 2 KLD (Freeh)
Wa	ter comes (F-3 + Rec-25) 2 KLD (Fresh) 4 KLD 20 KLD (Rec.) 3 KLD (Fresh) 2 KLD (Tresh)
110	Raw Evp. Loss 1 KLD Loss 17 KLD Loss 17 KLD Loss
m 2	aterials SKLD Blow down 3 KLD
	generation 51 Blow down 3 KLD
	ETP 62 KLD
F	O Permeate
	RO 46.7 KLD Sludge- 2 KLD To TSDF Site
ME	Condensate 26.7 KLD
25	MEE 26.7 KLD MEE Salt 1.7 KLD To TSDF Site
*46 KLD	Boiler condensate and 640 KLD Cooling tower recirculation is also reuse in daily bases
E	AIR

Π

	Flu	le	gas emis	sion deta	ils								
	No). O	f Boilers/1	FH/Furna	ces/E	DG se	ets etc.	. with	capacities vi	iz. TPH, Kcal/	hr, MT/hr, KVA	etc.	
	(In	са	ase of Proj	ect locate	d with	nin CF	PA/SP	PA , Al	PCM shall be	e in line to the	mechanism pu	olished	
	the	e M	IOEFCC's	OM vide	dated	31.1	0.201	9)					
xi	isting												
			Source						Type of				
	Sr.		of	Stack	Ту	ре	Quan	tity	emissions	Air Polluti	on Control		
	no.	е	mission	mission With	Height	0	f	of Fu	lel	i.e. Air	Mea	sures	
3		c	With Capacity	(meter)	Fu	el	MT/D	Day	Pollutants	(AF			
		3 Boiler (500 KG) 4 Hot Air Generato r (50 000		11	Natural				PM SO ₂ NO _X	Adequate	stack height		
4	ot Air 11 nerato r			Gas		3/hr −	PM SO ₂	, acquates	Statist Holght				
		(50,000 Kcal/Hr)							NO _X				
Af	fter P	rop	bosed Ex	pansion							A !		
	Sr.	no	o. ei With	Source of s emission H With Capacity (r		Stack Type Height of (meter) Fuel		ype of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)		
		1	(Boiler 2 TPH)		20	Na (atural Gas	3360 m3/Day		Adequate stack		
	2	2.	G (2	Hot Air enerator 2,00,000 Kcal/Hr)		20	Na (atural Gas	600 m3/Day	PM SO ₂ NO _X	height		
	3	3.	(2	9. G. Set 50 KVA)		11	D	iesel	360 Lit/Day		Adequate stack height		

-Existing

There is no process gas emission.

- As per proposed Expansion

There is no process gas emission.

Note:

- > Details of gaseous raw materials used in proposed project
- Estimation of process gas emission (Product wise and Total)
- > Requirement of the scrubbing media (KL per Day) considering solubility (Product wise and Total)
- > Yearly generation of all bleed liquors (MT/KL per Annum) as mentioned above and its sound management in HW matrix.

E-4	Fugitive e	emission details with its m	itigation measure	S.								
	Sr. No.	Source	Probable Pollutant Emission	Control Measures/ APCM								
	1	Handling of raw material bags in storage area	Air pollutant (PM)	 i) Provision of exhaust ventilation Provision of PPE. ii) Provision of Job rotation to reduceexposure. 								
	2	Solid raw material transferring to reactor	Air pollutant (PM)	Hopper will be provided with powder transfer system.								
	3	Liquid raw material transferring to reactor	Air pollutant	Feeding of liquid raw material will be carried out by closed pipeline and mechanical seal pump.								
	4	Loading /unloading at storage area	Air pollutant	Unloading through pipeline to tank in a close system.								
F	Hazardou	is waste										
	(As per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules											
	2016.											
	Note:											
	> Pr	iorities for HW Managem	ent: Pre-processi	ng, Co-Processing, Reuse/Recycle within								
	pro	emises, Sell out to actual ι	sers having Rule-	9 permission, TSDF/CHWIH.								
	> Qı	uantification of hazardou	s waste shall be	based on mass balance and calculations								
	sh	all be incorporated in EN	/IP details separa	itely.								
	> Di	sposal to scrap vendors/	/vendors/traders	is not allowed								
F-1	Hazardou	is waste management m	atrix									
Existing	& Propos	ed										

	Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the	Category and Schedule as per		Quantity (MT/Annui	n)	Management of HW
			Activity, Product etc.)	HW Rules.	Existi ng	Proposed	Total	
	1.	Empty barrels/containers/line rs contaminate with hazardous chemicals/wastes	From Packing Material	33.1	3.00	27	30	Collection, storage, transportation & disposal by selling to GPCB authorized recycler
	2.	Used or Spent oil	From Lubrication	5.1	0	4	4	Collection, storage, transportation & disposal by selling to GPCB authorized recycler/refiner.
	3.	Spent Carbon	ETP	28.3	0	1	1	Collection, Storage &Disposal by sent it to Co-processing
	4.	RO membrane	RO	35.2	0	2	2	Collection, storage within factory premises, transportation and Disposal at TSDF.
	5.	ETP Sludge MEE salt	From ETP From MEE	35.3	1.2 0	718.8 612	720 612	Collection, storage within factory premises, transportation and Disposal at TSDF.
F-2		Membership details of (For HW managemer	TSDF, CHWI	F etc.	·			
Deta BEIL	ils of . Ank	Membership letter no. leshwar	& Date with s	pare capac	ity of th	ne Commo	n Facilit	y.
F-3		Details of Non-Hazard (MSW and others)	lous waste & i	ts disposal				
Sr.	No.	Name of Non- Hazardous waste	Quantity I	MT/Annum		Handling/	' Dispos	al
1 2 3		Wood Waste Glass Waste Paper waste	2 1 0.5			Given to a Given to a Given to a	authoriz authoriz authoriz	ed scrap dealers ed scrap dealers ed scrap dealers
		· · ·						· · · · · · · · · · · · · · · · · · ·
6	T	<u></u>						
G		Solvent managemen		ons etc.	1			
G-1		Brief Note on types of	solvents, Deta	alls of Solve	ent reco	overy, % re	covery,	reuse of recovered

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	Solvents	etc.									
*There is	l s no anv so	lvent use in manufacturir	a process								
G-2	Brief Not	e on I DAR proposed	31								
	tection and	Repair (LDAR) is a pro	aram implemente	d to comply with	environmental reg	ulations for					
reducing emission conservi	the fugitivns, LDAR F	Program also helps the i & increasing their profitat	chemicals into the ndustries to reduce of the nd	ne environment.	In addition to con sses of chemicals a	trol fugitive and thereby					
G-3	VOC emi	ssion sources and its mi	tigation measures								
> T	here is no	source of VOC. Unit will	not use solvent								
н	SAFETY details										
H-1	Details regarding storage of Hazardous chemicals										
	(For tank	storages only includin	g spent acid and	spent solvent	tanks)						
-		1				_					
	Sr. no	Name of Chemical	Capacity of	Number of	Hazardous						
			Tank	Tanks	Characteristics						
					of Chemical						
	1	There is no any solvent	t]					
<u>Brief no</u>	te on stora	age of Hazardous chem	icals in Tanks								
> N	lot Applicat	ble									
Brief no	te on stora	age of Hazardous chem	icals other than	<u> Fanks i.e. Drum</u>	, Barrels, Carboys	, Bags					
<u>etc.</u>											
≻ N e b	AOC of drui lectrical fitt le available	n will be as per compatib ing as and firefighting me at require area.	ility of chemical a easures to eliminat	nd drum materia e fire as well as	ls. Unit will provide other hazard. Spilla	flame proof age kit will					
<u>Safety d</u>	letails of H	azardous Chemicals:									
Type of	f	Safety measures									
Hazard	ous	-									
Chemic	cals										
Acid		Storage material will be	as per compatibili	tv class. Trained	person will						
		handle that.									
Toxic		Storage in compatible s	torage unit with sa	fe distance with	other						

> Ap	plicabilit	y of PESO : Not applicable					
H-2 1	Types of	hazardous Processes invol	ved and its	safety measures:			
((Hydroge	enation process, Nitration pr	ocess, Chlo	prination process, Exothermi	c Reaction etc.)		
- The	ere will b	e no any hazardous proces	ses involve	d.			
Type of	Saf	ety measures including Aut	omation				
Process							
Н-3 [Details of	f Fire Load Calculation					
-							
	Total F	Plot Area:		1607.97			
	Area u	itilized for plant activity:		867.90			
	Area u	tilized for Hazardous Chemica	als	100			
	Storag	le:					
	Numbe	er of Floors:		G+2			
	Water	requirement for firefighting in	KLD :	4.3 KL			
	Water	storage tank provided for firef	ighting in	200 KL			
	KLD:						
	Details	s of Hydrant Pumps:		Main Pump cap: 70 HP			
				DG Pump cap: 80 HP			
	Neares	st Fire Station :		DPMC Ankleshwar- 3.35 Km			
	Applica	ability of Off Site Emergency F	Plan:	N.A			
H-4 [Details of	f Fire NOC/Certificate:					
Unit will an	oply for Fi	re NOC after proposed expan	sion.				
H-5 [Details of	f Occupational Health Centr	e (OHC):				
	N	umber of permanent	10 Nos.				
	E	mployee :					
	N	umber of Contractual	6Nos.				
	р	erson/Labour :					
	Area provided for OHC:						
	N	umber of First Aid Boxes :	2 Nos.				
	N	earest General Hospital :	3.47 KM				
	N	ame of Antidotes to be	Folinic acid	(Leucovorin),			
	st	tore in plant :	B nzocaine	(Novocaine) solution for eye,			

Dexona,Avil

- During meeting, Committee noted that PP presented prescribed format for B1 project in place of B2 project along with mentioning existing production plant. PP presented that unit was established based on NOC/CCA in 1990 (before EIA notification 2006). After that EC was granted in 2007, but due to moratorium guideline of critical zone for period unit was not able to convert in to CCA. Also, validity of EC is for 7 years. Validity of granted EC was completed in moratorium period, thus unit have to again apply for EC expansion and readdress ToR no-1.PP presented production details from year 2007 to 2021 and revised GIDC Notified area letter with mentioning for area provided for green belt area for PP is not allocated to another industry in future and details of how many trees planted in Proposed green belt area, along with Longitude and Latitude of proposed greenbelt area and its maintenance responsibility for green belt development. PP submitted baseline data along with incremental in GLC and each and every specific ToR compliance in tabular form.
- After detailed discussion, Committee unanimously decided to recommend the project to SEIAA, Gujarat for grant of Environment Clearance with the following specific condition:

SPECIFIC CONDITIONS:

- Project proponent (PP) shall install CEMS [Continuous Emission Monitoring System] in line to CPCB directions to all SPCB vide letter no. B-29016/04/06PCI-1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis. [For Small/Large/Medium (Red Category) & Whichever (Air emission & Effluent discharge) is applicable].
- 2. Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines. LDAR Logbooks shall be maintained.
- The National Ambient Air Quality Emission Standards issued by the Ministry vide G. S. R. No. 826 (E) dated 16th November, 2009 shall be complied with.
- National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G. S. R. 608 (E) dated 21/07/2010 and amended from time to time shall be followed.
- 5. Unit shall have to adhere to the prevailing area specific policies of GPCB with respect to the discharge of pollutants, and shall carry out the project development in accordance & consistence with the same.
- 6. The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority.
- 7. All measures shall be taken to avoid soil and ground water contamination within premises.
- 8. GPCB shall ensure compliance of direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP and also that the pollution load is

not increased in the CPA/SPA for the compliance of Hon'ble NGT order.

WATER

- 9. Total water requirement for the project shall not exceed 59 KLD. Unit shall reuse 45 KLD of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 14 KLD and it shall be met through GIDC supply only. Prior permission from concerned authority shall be obtained for withdrawal of water.
- 10. The industrial effluent generation from the project shall not exceed 59 KLD after expansion.
 - Total Industrial effluent shall be treated in ETP and then 13.3 KLD, treated effluent shall be sent to CETP of M/s ETL for further treatment and disposal and remaining 46.70 KLD, treated effluent shall be treated in RO plant. 20 KLD, RO permeate shall be reused back in process while 26.70 KLD RO reject shall be evaporated in in-house MEE. 25 KLD,RO permeate shall be reused back in process within plant.
- 11. Unit shall discharge wastewater to CETP of ETL only after complying with inlet norms prescribed by GPCB and ensuring content of effluent for COD/VOC so as not to get air borne during evaporation in order to achieve no adverse impacts on Environment and Human Health.
- 12. Domestic wastewater generation shall not exceed 3 KL/day for proposed project and it shall be treated in ETP. It shall not be disposed off through soak pit/ septic tank.
 AIR
- 13. Unit shall not exceed fuel consumption and provide APCM and Stack height as mentioned in flue gas matrix.
- 14. Unit shall provide APCM and stack height as mentioned in process gas matrix.
- 15. PP shall use approved fuels only as fuel in boilers.

HAZARDOUS & SOLID WASTE

- 1. All hazardous solid waste shall be managed as mentioned in hazardous waste matrix.
- 2. The unit shall submit the list of authorized end users of hazardous wastes along with MoU signed with them at least two months in advance prior to the commencement of production. In the absence of potential buyers of these items, the unit shall restrict the production of the respective items.

GREENBELT AREA

3. The PP shall develop green belt within premises (443 Sq m within premises and 95 sq. Meter outside premises i.e.538 sq. Meter >33 % of the total plot area) as per the undertaking submitted before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.

9. Safety & Health:

- a) PP shall obtain PESO permission for the storage and handling of hazardous chemicals.
- b) PP shall provide Occupational Health Centre (OHC) as per the provisions under the Gujarat Factories Rule 68-U.
- c) PP shall obtain fire safety certificate / Fire No-Objection certificate (NOC) from the concern authority as per the prevailing Rules / Gujarat Fire Prevention and Life Safety Measures Act, 2016.
- d) Unit shall adopt functional operations/process automation system including emergency response to eliminate risk associated with the hazardous processes.
- e) PP shall carry out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in the manufacturing area in case of any emergency or accident.
- f) PP shall install adequate fire hydrant system with foam trolley attachment within premises and separate storage of water for the same shall be ensured by PP.
- g) PP shall take all the necessary steps for control of storage hazards within premises ensuring incompatibility of storage raw material and ensure the storage keeping safe distance as per the prevailing guidelines of the concerned authority.
- PP shall take all the necessary steps for human safety within premises to ensure that no any harm is caused to any worker/employee or labour within premises.
- i) Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.

5	SIA/GJ/IND2/177089/2020	M/s. Remission Pharma Care Pvt. Ltd.	EC-Reconsideration
		Plot No. 2, Umiya Indu. Estate, Indrad,Ta-Kadi, Dist - Mehsana	

Category of the unit: 5(f)

Project status: New

- Project proponent (PP) submitted online application vide no. SIA/GJ/IND2/177089/2020 on dated 04.11.2020 for obtaining Environmental Clearance.
- Project proponent has submitted Form 1, Pre-Feasibility Report & Environment Management Plan as per Notification issued by MoEF&CC vide S.O. 1223(E) dated 27th March, 2020 regarding consideration of proposals or activities in respect of Active Pharmaceuticals Ingredients (API) as B2 category.
- This is a new project proposed for manufacturing of synthetic organic chemicals [API & its Intermediates] as tabulated below:

SR. NO	PRODUCT NAME	CAS No.	Proposed MT/Month	End use of the Product
1.	Amisulpride	71675-85-9	5	Amisulpride is an atypical anti- psychotic medicine that is used to treat symptoms like hallucinations, delusions, thought disturbances,

				lack of interest, apathy .		
2.	Doxepin Hydrochloride	1229-29-4		It is used in the treatment of depression and anxiety		
3.	Dothiepin(Dosulepine) Hydrochloride	897-15-4		It is used in the treatment of depression		
4.	Silodosin	160970-54-7	1	It is used in men to treat the symptoms of an enlarged prostate		
5.	Artemether	71963-77-4		It is an antimalarial agent used to treat acute uncomplicated malaria		
6.	Adapalene	106685-40-9		It is used to treat acne.		
7.	Levosulpiride	23672-07-3 It is us Gastr	It is used in the treatment of Gastroesophageal reflux disease			
8.	Benfotiamine	22457-89-2		It is used to treat nerve damage caused by diabetes It is treated mental/mood problems such as depression It is used to treat a wide variety of bacterial infections		
9.	Amitriptyline Hydrochloride	549-18-8	5			
10.	Erythromycin Stearate	643-22-1				
11.	Erythromycin Estolate	3521-62-8		It is used to treat infections		
12.	Clotrimazole	23593-75-1		It is an antifungal medicine		
13.	Lumefantrine	82186-77-4		It is used to treat malaria.		
14.	Telmisartan	144701-48-4	55	It is used to treat high blood pressure (hypertension)		
15.	Terbinafine Hydrochloride	91161-71-6	1	It is used to treat infections caused by a fungus		
	Total	·	16 MT/Month	-		

Product Profile:

1. No of Manufacturing Plants: 1 no.s

2. Brief Note regarding number of Products to be manufactured considering plant capacity: 2 Products

Specific End-use of each proposed products:

			Typo/	In ca	se of Interme stage of API	diate	
Sr. No.	Name of the Product	CAS No. (Product)	Category of Product (API/ Intermediate)	Stage i.e. n-1, n-2, etc.	Name of API in which Intermediate Used/ End use of said Intermediate	CAS no. (API)	Said API is used for/End Use of said API
1	Amisulpride	71675- 85-9	API	-	-	-	Amisulpride is an atypical anti-psychotic medicine that is used to treat symptoms like hallucinations, delusions, thought disturbances,

							lack of interest, apathy .
2	Doxepin Hydrochloride	1229-29- 4	API	-	-	-	It is used in the treatment of depression and anxiety
3	Dothiepin(Dosulepi ne) Hydrochloride	897-15-4	API	-	-	-	It is used in the treatment of depression
4	Silodosin	160970- 54-7	API	-	-	-	It is used in men to treat the symptoms of an enlarged prostate
5	Artemether	71963- 77-4	API	-	-	-	It is an antimalarial agent used to treat acute uncomplicated malaria
6	Adapalene	106685- 40-9	API	-	-	-	It is used to treat acne.
7	Levosulpiride	23672- 07-3	API	-	-	-	It is used in the treatment of Gastroesophagealreflux disease
8	Benfotiamine	22457- 89-2	API	-	-	-	It is used to treat nerve damage caused by diabetes
9	Amitriptyline Hydrochloride	549-18-8	API	-	-	-	It is treated mental/mood problems such as depression
10	Erythromycin Stearate	643-22-1	API	-	-	-	It is used to treat a wide variety of bacterial infections
11	Erythromycin Estolate	3521-62- 8	API	-	-	-	It is used to treat infections
12	Clotrimazole	23593- 75-1	API	-	-	-	It is an antifungal medicine
13	Lumefantrine	82186- 77-4	API	-	-	-	It is used to treat malaria .
14	Telmisartan	144701- 48-4	API	-	-	-	It is used to treat high blood pressure (hypertension)

15	Terbinafine Hydrochloride	91161- 71-6	API	-	-	-	It is used to treat infections caused by a fungus	
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- The project falls under Category B2 of project activity 5(f) as per the schedule of EIA Notification 2006 and amendment dated 27th March, 2020.
- PP submitted an undertaking ensuring proposed product profile is in line with MoEF&CC's Notification vide S.O. 1223 (E) dated 27/03/2020 in respect of Active Pharmaceutical Ingredients (API) as category B2 projects. Undertaking as proposal of said product are eligible to consider under B2 category as per the notification of MoEF&CC dated 27.03.2020
- The proposal was considered in the SEAC video conference meeting dated 01.02.2021
- During the meeting dated 01.02.2021, the project was appraised based on the information furnished in Form
 1, Pre-Feasibility Report, Environment Management Plan and details submitted by e-mail.
- Project proponent (PP) and their Technical Expert from M/s. B S Rana remain present during video conference meeting.
- Committee noted that this is a new project proposed for manufacturing of Synthetic organic chemicals [API and Its Intermediates] plant at Plot No. 2, Umiya Industrial Estate, Village Indrad, District- Mehsana. Total plot area is 2279 Sq m.
- PP submitted that nearest residential area of Village is Indrad @ 2.52 Km and there is no water bodies, natural drain, National monuments within 500 m radius from the project boundary. There are no Eco sensitive zones, wild life sanctuaries within the 10 km area and no water bodies, natural drain, national monuments, etc. within 500 m radius from the boundary of the project site.
- Since, the unit falls in B2 category as per the MoEF&CC's amended EIA Notification vide S.O. 1223(E) dated 27.03.2020, the public consultation is not applicable as per paragraph 7(i) III (i) (e) of the Environment Impact Assessment Notification-2006.
- Committee deliberated on siting criteria, Product profile and its specific end-uses, Layout plan, Storage details, Process safety, Fire safety, water balance & waste water management, Flue gas and process gas emission & Air Pollution Control System, Hazardous waste matrix, EMP, CER, Green belt etc.
- Committee noted the following:
 - NA documents in the name of Shri Jashavantbhai Becharbhai Patel mentioning purpose of NA as multipurpose. Land possession documents of the unit.
 - ✓ Source of water is borewell and will apply for CGWA permission.
 - \checkmark At a time three products can be manufactured.
 - ✓ Stream wise segregation of waste water is proposed for better management.
 - Generated industrial effluent will be treated in Primary ETP followed by RO. RO permeate will be reused within premises and RO reject will be sent to common spray dryer.
 - ✓ Domestic wastewater will be treated in STP and reused for gardening/ plantation.

255th meeting of SEAC-Gujarat, Dated 05.08.2021

- ✓ Natural gas or agro waste is proposed as fuel for Boiler and thermopack.
- ✓ There will be no process gas emission.
- PP submitted hazardous waste matrix mentioning source of generation, quantity and Mode of disposal and committed to comply the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
- Committee asked (1) Revised Site Plan/ layout with provision 33% greenbelt within premises and fire hydrant system in ETP and Hazardous waste storage area, (2) copy of application of CGWA permission for withdrawal of water, (3) revised fire load calculation mentioning adequate fire water reservoir, foam trolley type fire extinguishers, fire proximity suits, etc. and (4) Membership of common spray dryer having valid CCA and mentioning total capacity, consented quantity, occupied capacity and spare capacity.
- After deliberation, SEAC unanimously decided to consider the proposal in one of the upcoming meeting of SEAC after submission of following details:
 - 1. Revised Site Plan/ layout with provision 33% greenbelt within premises and fire hydrant system in ETP and Hazardous waste storage area.
 - 2. Copy of application of CGWA permission for withdrawal of water.
 - 3. Revised fire load calculation mentioning adequate fire water reservoir, foam trolley type fire extinguishers, fire proximity suits, etc.
 - 4. Membership of common spray dryer having valid CCA and mentioning total capacity, consented quantity, occupied capacity and spare capacity.
- PP submitted the reply of the said points along with other supporting documents
- This proposal is reconsidered in SEAC meeting dated 05.04.2021. PP along with their technical expert/consultant from M/s B S Rana remains present in the meeting and made presentation before committee.
- PP presented revised salient features of the project including Water, Air and Hazardous waste management are as under:
- During meeting dated: 01.04.2021, PP presented revised Site Plan/ layout with provision of separate entry & exit, 6 m peripheral road for emergency exit, ETP & STP, utility, Plant area, raw material & finished goods storage areas, OHC (25 Sq m). Also presented land area break-up for each components.
- Committee noted the following details:
 - ✓ Copy of application of CGWA for withdrawal of water.
 - ✓ Revised fire load calculation with provision of fire water storage (Cap: 120 KL) and 3 Nos of foam type extinguishers (Cap: 5 Kgs).
 - ✓ PP presented that they are having membership of M/s Umiya Enviro Project LLP which is not having CCA. Also, PP further informed that M/s Umiya Enviro Project LLP will commission in June-2021 and their plant will be commissioned in March-2022.
- Committee insisted (1) to provide adequate fire water storage and foam trolley looking to the location of the site, storage of hazardous chemicals and plot size and (2) Membership of common facilities having valid CCA

of GPCB and mentioning capacities as per GPCB circular dated: 08.01.2020. .

After deliberation, SEAC unanimously decided to consider the proposal in one of the upcoming meeting of SEAC after submission of following details:

- 1. Revised fire load calculation mentioning adequate fire water storage and foam trolley type extinguishers looking to the location of the site, storage of hazardous chemicals and plot size.
- 2. Membership of common facilities having valid CCA of GPCB and mentioning capacities as per GPCB circular dated: 08.01.2020.
- PP submitted the reply of the said points along with other supporting documents
- This proposal is reconsidered in SEAC meeting dated 05.08.2021. PP along with their technical expert/consultant from M/s B S Rana remains present in the meeting and made presentation before committee.
- PP presented revised salient features of the project including Water, Air and Hazardous waste management are as under:

Sr. no	Particula	rs				[Details			
A-1		Total cos	st of F	Proposed	Project		I			
		(Rs. in C	rores	s):						
				Total	Project	7				
				3.5 C	rores					
		Break-up	o of p	proposed project Cost:						
			Sr No	Cost	of project	Cost in Rs Cr				
				01.110.			Proposed			
				1	Land	d & building	1.6			
				2		Plant &	0.9			
				3	IVI	EMP	0.35	_		
				4		Other	0.68	_		
						Total	3.5			
A-2		Details o	f Env	rironmenta	al Manage	ement Plan (EN	1P) /	As below:		
Sr. No		Unit	[Detail	Capital Cost (Rs. In Crores)	Operating Cost (Rs. In Crores)	Maintenance Cost (Rs. In Crores)	Total Recurring Cost (Rs. In Crores)		
1	Air C	Air Pollution Control		ETP	0.07	0.020	0.010	0.030		
2	Water Pollution Control		A	APCM	0.14	0.050	0.020	0.070		
3	Po C	Noise ollution Control	Ма	achinery	0.01	0.004	0.001	0.005		

4	Haza wa	rdous iste	MEM a Dispos	and sal	0.02	0).005		0.00	5	0.010
	Manad	nagement									
5	Enviro Moni a	onment toring nd	Labora	tory	0.02	().003		0.00	2	0.005
	Manaç	gement									
6	Rain Harv	Water esting	Percola well	ation I	0.04	0).005		0.00	5	0.010
7 (Occup Hea Sa	ational lth & fety	Medic Check	cal tup	0.03	().005		0.00	5	0.010
8	Green Belt		Plan	ıt	0.02	(0.005		0.00	5	0.010
I	Total				0.35	().097		0.05	3	0.150
Summa	ary									<u> </u>	
	Cos	st of Proj	ject in Cro	ores p	er Annu	ım:		3.5 (Cr		
	EM	P Capita	al Cost in	Crore	es per Ar	nnum a	nd	0.35 Cr			
	Per	centage	:					(10 %)			
	1						0.15 Cr				
	EM	P Recur	ring Cost	in Cr	ores per	Annum	า	0.15	Cr		
	EM and	P Recur Percen	ring Cost tage:	t in Cr	ores per	Annum	า	0.15 (4.28	Cr 3%)		
A-3	EM and	P Recur I Percen Details o	ring Cost tage: f CER as	t in Cr	ores per	Annum ed 01/0	ר 5/20	0.15 (4.28 18(In c	Cr 3%) ase of proje	ct falls under	r CPA/SPA,
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A-3	EM and I G	P Recur Percen Details o und allocati CPA in cas 11.10.2019.)	ring Cost tage: f CER as on to be at l e of Environ	t in Cr s per least 1.5 nmental % as 2 %	OM date OM date times the Clearance per the (ed 01/0 slabs give as per	n 5/201 en in th the mo Rs. 0.07	0.15 (4.28 18(In c ne OM c echanis in Crc	Cr 3%) ase of proje dated 01.05. m published pres	ct falls under 2018 for SP/ d vide MoEF	r CPA/SPA, A and 2 tim &CC's OM
A-3 Brief no	EM and fi c 3	P Recur d Percen Details o und allocati CPA in cas 11.10.2019.)	ring Cost tage: f CER as on to be at le e of Environ) (2 d activitie	t in Cr s per least 1.5 nmental % as 2 %	OM date OM date times the Clearance	ed 01/0 slabs give e as per	n 5/20 ⁷ en in th the mo Rs. 1 0.07	0.15 (4.28 18(In c ne OM c echanis in Crc	Cr 3%) ase of proje dated 01.05. m published pres	ct falls under 2018 for SP/ d vide MoEF	r CPA/SPA, A and 2 tim &CC's OM
A-3 Brief no	EM and f c 3	P Recur d Percen Details o und allocati CPA in cas 11.10.2019.)	ring Cost tage: f CER as on to be at l e of Environ	t in Cr s per least 1.5 nmental % as 2 % es:	OM date 5 times the 1 Clearance per the 0	ed 01/0 slabs give e as per	n 15/201 en in th the mo Rs. 0.07 Bud	0.15 (4.28 18(In c ne OM c echanis in Crc 70	Cr 3%) ase of proje dated 01.05. m published pres	ct falls under 2018 for SP/ d vide MoEF	r CPA/SPA, A and 2 time &CC's OM
A-3 Brief no	EM and f c 3	P Recur d Percen Details o und allocati CPA in cas 11.10.2019.) proposed Planne under o	ring Cost tage: f CER as on to be at line of Environ d activitie	t in Cr s per least 1.5 nmental % as 2 % es:	OM date 5 times the 1 Clearance per the 0	Annum ed 01/0 slabs give e as per DM	n 15/20 ⁻¹ en in th the mo Rs. 0.07 Bud 3rd	0.15 (4.28 18(In c ne OM c echanis in Crc 70	Cr 3%) ase of proje dated 01.05. m published ores Rs. Lakhs 4th year	ct falls under 2018 for SP/ d vide MoEF	r CPA/SPA, A and 2 tim 8CC's OM
A-3 Brief no	EM and f c 3 ote on S. No.	P Recur d Percen Details o und allocati CPA in cas 11.10.2019.) proposed Planne under o specif neare	ring Cost tage: f CER as on to be at line of Environ d activitie d activitie CER as p ic needs est village	t in Cr s per least 1.5 nmental % as 2 % es: 2 %	OM date Times the Clearance per the (1 st year (20-21)	Annum ed 01/0 slabs give e as per DM 2nd year (21- 22)	n 15/20 en in th the mo Rs. 0.07 Bud 3rd	0.15 (4.28 18(In c ne OM c echanis in Crc 70 Iget (F year 22- 23)	Cr 3%) ase of proje dated 01.05. m published ores Rs. Lakhs 4th year (23- 24)	ct falls under 2018 for SP/ d vide MoEF	r CPA/SPA, A and 2 tim &CC's OM
A-3 Brief no	EM and fi c 3 ote on S. No.	P Recur d Percen Details o und allocati CPA in cas (1.10.2019.) propose Planne under specif neare	ring Cost tage: f CER as on to be at lu- e of Environ d activitie CER as p ic needs est village	t in Cr s per least 1.5 nmental % as 2 % es: es at ss (OM date 5 times the 1 Clearance per the (1 st year (20-21) Indrad&	Annum ed 01/0 slabs give e as per OM OM 2nd year (21- 22) Bileswa	n 5/20 ⁷ en in th the mo Rs. i 0.07 Bud 3rd (2 arpur	0.15 (4.28 18(In c echanis in Crc 70 Iget (F year 22- 23) 7a	Cr 3%) ase of proje dated 01.05. m published pres Rs. Lakhs Ath year (23- 24)	ct falls under 2018 for SP/ d vide MoEF	r CPA/SPA, A and 2 tim & CC's OM
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A-3 Brief no	EM and fi c 3 ote on 5. No.	P Recur d Percen Details o und allocati CPA in cas (1.10.2019.) propose Planne under specif neare Sola (1	ring Cost tage: f CER as on to be at lu- e of Environ d activitie CER as p ic needs est village ar Panels 0 Nos) uct medic camp	t in Cr s per least 1.5 nmental % as 2 % es: 2 % es: 2 % es: 2 % es: 2 % es: 2 %	OM date 5 times the 1 Clearance per the ((20-21) Indrad& 0.3 Indrad& 0.5 hanot/Ch	Annum ed 01/0 slabs give e as per OM 2nd year (21- 22) &Bileswa 0.3 &Karan 0.3 madasar	n 15/20 en in th the ma Rs. 0.07 Bud 3rd (2 2 arpur (2 2 arpur (2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.15 (4.28 18(In c ne OM c echanis in Cro 70 1get (F year 22- 23) 7 2 2- 23) 7 2 2- 23 0.2 1r 0.3 drad	Cr 3%) ase of proje dated 01.05. m published ores Rs. Lakhs 4th year (23- 24) 0.1 0.2	ct falls under 2018 for SP/ d vide MoEF 5) 5 th Year (23-24) 0.1 0.2	Total

15

		gradation c structur toiletfa	of existing e like, cility.	0.5	0.5	0.5	0.25	0.25	2.0			
		Comm	unity	Dhanot	, Ambav	pura						
	4	Planta	ation	0.25	0.25	0.20	0.20	0.10	1.0			
		Indrad/Dhanot										
	5	I rainin aware programn Skill Develo schoo Environm	g and ness ned and opment in ol on ent day	0.5	0.3	0.3	0.2	0.2	1.5			
		and Safe	ety Day									
				Tota					7.0			
В		Land / Plot c Land owners	wnership ship docur	details: nent enclo	osed in th	ne Annex	kure-XIII.					
B-1		Plot area										
		Total Plot area										
B-2		Brief note on Area adequacy in line to proposed project activities:										
		Considering the 16 MT per month of production rate and having plot area is										
	:	2279sqm it is justify.										
_		Green belt area										
B-3	(Green belt a	rea									
B-3		Green belt a	rea			T (Sq.	otal meter)					
B-3		Green belt a	rea	Sq. mete		T (Sq. 29	otal meter)					
B-3		Green belt a	rea Area in % of tota	Sq. mete	•	T (Sq. 29 (otal meter) .31% 568					
B-3		Green belt a	rea Area in % of tota	Sq. mete al area		T (Sq. 29 (otal meter) .31% 568					
B-3 C		Green belt a	Area in % of tota	Sq. mete al area on	· · · · · · · · · · · · · · · · · · ·	T (Sq. 29 (otal meter) .31% 568					
В-3 С		Green belt a	Area in % of tota	Sq. mete al area on	Tot	T (Sq. 29 (otal meter) .31% 568					
B-3 C		Green belt a	Area in % of tota	Sq. mete al area on	- - - Tot 18	T (Sq. 29 (al	otal meter) .31% 568					
B-3 C		Green belt a	Area in % of tota	Sq. meter al area		T (Sq. 29 (al	otal meter) .31% 568					
B-3 C		Green belt a Employment WATER	rea Area in % of tota generatic	Sq. mete al area on	- - - - - - - - - - - - - - - - - - -	T (Sq. 29 (; al	otal meter) .31% 568					
B-3 C D D-1		Green belt a Employment WATER Source of W	rea Area in % of tota generatic	Sq. mete al area on		T (Sq. 29 (otal meter) .31% 568					
B-3 C D D-1		Green belt a Employment WATER Source of W (GIDC, Bore well Estate Supply.	rea Area in % of tota generatic generatic	Sq. mete al area on ly er, Tanker su	Tot	T (Sq. 29 (otal meter) .31% 568					
B-3 C D D-1		Green belt a Employment WATER Source of W (GIDC, Bore well Estate Supply. Status of pel	rea Area in % of tota generatic generatic ater Supp , Surface wate	Sq. meter al area on ly er, Tanker su	Tot	T (Sq. 29 (al	otal meter) .31% 568					
B-3 C D D-1		Green belt a Employment WATER Source of W (GIDC, Bore well Estate Supply. Status of per ≽ Indus	rea Area in % of tota generatic generatic generatic strial Estat	Sq. meter al area on ly er, Tanker su rom the co	Tot 18 pply etc)	T (Sq. 29 (al	otal meter) .31% 568					
B-3 C D D-1 D-2		Green belt a Employment WATER Source of W (GIDC, Bore well Estate Supply. Status of pel ➢ Indus Water consu	rea Area in % of tota generatic generatic ater Supp , Surface wate rmission fr strial Estat	Sq. mete al area on ly er, Tanker su rom the co re. LD)	Tot	T (Sq. 29 (al	otal meter) .31% 568					

	Category]
	(D) Do	omestic		1.0	1.0 KLD	Fresh	
	(E) G	ardening	3	2.0	1.2KLD Fresh	1 +0.8 KLD	
			-		Recyc	led	
	(F) In	dustrial					
			Process	2.1	2.1 KLD	Fresh	
			Washing	1.5	0.3 KLD Fre	sh + 1.2	
			5	_	Recvcle RO	permeate	
			Boiler	20	20 KI D	Fresh	
			Cooling	3.0		cycle RO	
			Cooling	0.0	Derme	ate	
		ç	Scrubbing	0.0	-	alo	
			Othors	0.0			
	Inductrial	Total	Others	0.0	4 4 KLD Eroch		
	muusinai	TOLAT		0.0	4.4 KLD FIESH	+ 4.2 KLD	
	Oren d Te			11.0			
	Grand To	tal (A+B	s+C)	11.0	0.0 KLD Fresh	+ 4.2 KLD	
					Recycle RO pe	ermeate	
	Drief Mate						
			St case sc			л.	
		ie water	consump	lion is calcu	lated on worst c	ase	
	SC	enario.					
	-	0		Quantit	Deve entre		
		Su	mmary or	Quantity	Remarks		
		roc	walei	KLD			
			tal water	11.6			
		requ	irement for	11.0			
		the	project (A)				
		Qua	antity to be	5.0	5.0 KLD		
		rec	cycled (B)	0.0	Recycle		
			, , , , , , , , , , , , , , , , , , ,		RO		
1							
					permeate		
		Total	fresh wate	r 6.6	6.6 KLD		
		Total requ	fresh water irement (C)	r 6.6	6.6 KLD Fresh		
		Total requ En	fresh water irement (C) sure Total v	r 6.6 water require	6.6 KLD Fresh ment = Fresh		
		Total requ En	fresh water irement (C) sure Total v water	r 6.6 water require + Recycled v	6.6 KLD Fresh ment = Fresh water		
		Total requ En	fresh water irement (C) sure Total v water i	r 6.6 water require + Recycled v .e. A = B + C	6.6 KLD Fresh ment = Fresh water		
		Total requ En	fresh water irement (C) sure Total v water i	r 6.6 water require + Recycled v .e. A = B + C	6.6 KLD Fresh ment = Fresh water		
	Reuse/Re	Total requ En	fresh water irement (C) sure Total water i etails (KLD	r 6.6 water require + Recycled v .e. A = B + C) with feasil	bility.		
	Reuse/Re [Source o	Total requ En ecycle do f reuse	fresh water irement (C) sure Total water i etails (KLD & applicati	$\begin{array}{c c} r & 6.6 \\ \hline water required \\ + Recycled \\ .e. A = B + C \\ \hline \end{array}$	bility.		
	Reuse/Re [Source o	Total requ En ecycle do f reuse	fresh water irement (C) sure Total water i etails (KLE & applicati	r 6.6 water require + Recycled v .e. A = B + C 0) with feasil on area]	bility.		
	Reuse/Re [Source o	Total requ En ecycle de f reuse	fresh water irement (C) sure Total water i etails (KLE & applicati	r 6.6 water required + Recycled v .e. A = B + C 0) with feasil on area] Characteri	bility.	ĸs	
	Reuse/Re [Source o	Total requ En ecycle do f reuse urce of raste	fresh water irement (C) sure Total water i etails (KLD & applicati Applica tion	r 6.6 water required + Recycled v .e. A = B + C 0) with feasil on area] Characteri cs of was	bility.	ks ng	
	Reuse/Re [Source o Sou wa	Total requ En ecycle do f reuse urce of raste ter for	fresh water irement (C) sure Total water i etails (KLC & applicati Applica tion area	r 6.6 water required + Recycled v .e. $A = B + C$ 0) with feasil on area] Characteri cs of wast water to b	bility.	ks ng y to	
	Reuse/Re [Source of Sou wa reu	Total requ En ecycle de f reuse urce of vaste ter for use in	fresh water irement (C) sure Total water i etails (KLE & applicati Applica tion area with	r 6.6 water required + Recycled v .e. A = B + C 0) with feasil on area] Characteri cs of wast water to b reused (cc	bility.	ks ng y to	
	Reuse/Re [Source o Sou wa reu KLI	Total requ En ecycle de f reuse urce of raste ter for use in D (From	fresh water irement (C) sure Total water i etails (KLE & applicati Applica tion area with quantity	r 6.6 water required + Recycled v .e. A = B + C 0) with feasil on area] Characteri cs of wast water to b reused (cc BOD, TDS et	bility.	ks ng y to	
	Reuse/Re [Source o Sou wa reu KLI wh	Total requ En En ecycle de f reuse urce of vaste ter for use in D (From ere it is	fresh water irement (C) sure Total water i etails (KLE & applicati Applica tion area with quantity in KLD	r 6.6 water required + Recycled v .e. A = B + C 0) with feasil on area] Characteri cs of wast water to b reused (cc BOD, TDS et	bility.	ks ng y to	
	Reuse/Re [Source o Sou wa reu KLI wh	Total requ En Ecycle de f reuse urce of vaste ter for use in D (From ere it is oming)	fresh water irement (C) sure Total water i etails (KLD & applicati Applica tion area with quantity in KLD (Where it	r 6.6 water required + Recycled v .e. A = B + C 0) with feasil on area] Characteri cs of wast water to b reused (cc BOD, TDS et	bility.	ks ng y to	
	Reuse/Re [Source o W wa reu KLI wh	Total requ En En Ecycle do f reuse urce of vaste ter for use in D (From ere it is oming)	fresh water irement (C) sure Total water i etails (KLC & applicati Applica tion area with quantity in KLD (Where it is used)	r 6.6 water required + Recycled v .e. A = B + C 0) with feasil on area] Characteri cs of wast water to b reused (cc BOD, TDS et	bility.	ks ng y to	
	Reuse/Re [Source of w wa reu KLI wh cc RO	Total requ En En ecycle de f reuse urce of raste ter for use in D (From ere it is oming)	fresh water irement (C) sure Total water i etails (KLE & applicati Applica tion area with quantity in KLD (Where it is used) Washin	r 6.6 water required + Recycled v .e. A = B + C 0) with feasil on area] Characteri cs of wast water to b reused (CC BOD, TDS et	bility. g/l 1.1 KLD	ks ng y to	
	Reuse/Re [Source of w wa reu KLI wh cc RO Per	Total requ En En En En En En En En En En En En En	fresh water irement (C) sure Total water i etails (KLE & applicati Applica tion area with quantity in KLD (Where it is used) Washin g	r 6.6 water required + Recycled v .e. A = B + C 0) with feasil on area] Characteri cs of wast water to b reused (cc BOD, TDS et COD- 90m BOD- 18m	bility. g/I 1.1 KLD g/I Recycled N	ks ng y to	
	Reuse/Re [Source o wa reu KLI wh cc RO Per	Total requ En En Ecycle de f reuse urce of raste ter for use in D (From ere it is oming) meate	fresh water irement (C) sure Total water i etails (KLE & applicati Applica tion area with quantity in KLD (Where it is used) Washin g	r 6.6 water required + Recycled v .e. A = B + C 0) with feasil on area] Characteri cs of wast water to b reused (CC BOD, TDS et COD- 90m BOD- 18m TDS-	permeate 6.6 KLD Fresh ment = Fresh water bility. sti Remark regarding pe feasibility pc.) g/l 1.1 KLD g/l Recycled N effected to	ks ng y to	
	Reuse/Re [Source of w wa reu KLI wh cc RO Per	Total requ En Ecycle do f reuse urce of raste ter for use in D (From ere it is oming) meate	fresh water irement (C) sure Total water i etails (KLE & applicati Applica tion area with quantity in KLD (Where it is used) Washin g	r 6.6 water required + Recycled v .e. A = B + C 0) with feasil on area] Characteri cs of wast water to b reused (CC BOD, TDS et COD- 90m BOD- 18m TDS- 240mg/I	permeate 6.6 KLD Fresh ment = Fresh water bility. sti Remark regarding pe feasibility pc.) g/I 1.1 KLD g/I Recycled N effected to product	ks ng y to	
		RO Permeate	Coolin	g O & G - Omg/l	3.0 KLD Recycled Use as make of evaporation loss Not effected products		
---	--	---	---	---	--		
D-3	In jus	case of no reus stification as wh	e/recyc y no re Il be reu (KI D)	cle of waste water, use/recycle. use of treated efflu	Give brief note on ent (RO Permeate).		
			(1120)				
		Category	/	Waste water KLD	Remarks		
		(C) Domesti	C	0.8	STP to Gardening		
		וומטstria (ש) וומט Dr		3.0	Treated in		
		Wa	Ishina	1.2	ETP		
			Boiler	0.2	(Primary &		
		C	ooling	0.3	Tertiary)		
		Scru	bbing	0.0			
		Ĺ	Others	0.0	be used for cooling		
		Total Industrial	waata	5.2	makeup & washing		
		i otar muustnar	wasie water	5.2			
		Total [/	A + B]	6.0			
Brief Note of	on worst ca	se scenario for	waste	water generation(C	Qualitative and Quantitative):		
➤ The wate	water table er generatio	e is considering on by doing clea	the wo	orst case scenario	we will be minimize the was		
Brief justific	ation in ca	se of no proces	s efflue	nt generation or n	o industrial effluent generation		
or no nigh d	concentration	on effluent gene	eration	rom proposed pro	ject (whichever is applicable		
\triangleright							
1	Mode of D	isposal & Final	meeting	g point			
D-4							
D-4 Domestic:	STP to	o Gardening					
D-4 - Domestic: Industrial:	STP to Dispo	o Gardening sed to the Com	mon Sp	oray Facility or mai	ntained ZLD Recycled RO		
D-4 Domestic: Industrial:	STP to Dispo perme	o Gardening sed to the Com eate and Evapo	mon Sp rated R	oray Facility or mai O reject inpremise	ntained ZLD Recycled RO		
D-4 Domestic: Industrial: Clearly mer	STP to Dispo perme	o Gardening sed to the Com eate and Evapo final disposal	mon Sp rated R	oray Facility or mai O reject inpremise	ntained ZLD Recycled RO s.		
D-4 Domestic: Industrial: Clearly mer D-5	STP to Dispo perme ntion about Treatment	o Gardening sed to the Com eate and Evapo final disposal facilities	mon Sp rated R	oray Facility or mai O reject inpremise	ntained ZLD Recycled RO s.		
D-4 Domestic: Industrial: Clearly mer D-5 For Domes	STP to Dispo perme ntion about Treatment tic waste w	o Gardening sed to the Com eate and Evapo final disposal facilities rater:	mon Sp rated R	oray Facility or mai O reject inpremise	ntained ZLD Recycled RO s.		
D-4 Domestic: Industrial: Clearly mer D-5 For Domes Capacity of	STP to Dispo perme ntion about Treatment tic waste w STP: 1 KI	o Gardening sed to the Com eate and Evapo final disposal facilities ater:	mon Sp rated R	oray Facility or mai O reject inpremise	ntained ZLD Recycled RO s.		

[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc.

Treatment scheme including segregation at source. (Give Characteristics of each stream i.e. COD, BOD, TDS etc.) In case of stream segregation, Separate ETP (ETP-1, ETP-2...) for each stream shall be proposed.

ETP (Primary Treatment)

Type of Treatment: Primary & Tertiary

Capacity of the ETP: 6 KLD

Flow to the ETP: 5.2 KLD

Characteristics of each stream:

Details	Process	Cooling	Boiler	Washing
Flow KL/day	3.2	0.3	0.2	1.5
рН	6	7-8	9-10	7-8
TDS mg/l	2500	3000	2500	1500
SS mg/l	210	30	20	120
COD mg/l	2400	40	20	400
BOD mg/l	450	6	3	27
Oil & Grease mg/l	0	<1	0	<1

Details	Inlet of FTP	Outlet of FTP	RO Permeate	RO
Dotano				Rejected
Flow KL/day	5.2	5.1	4.1	1.0
рН	6.0	7.5	8.0	7.2
TDS mg/l	2240	2100	240	9726
SS mg/l	166	36	8	151
COD mg/l	1595	790	90	3660
BOD mg/l	285	150	18	691
Oil & Grease mg/l	<1	0	0	0

Note: (In case of CETP discharge) :

Management of waste water keeping in view direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP.

≻ NA

Brief note on adequacy of ZLD (In case of Zero Liquid Discharge):

> NA

	D-6	In case of Common facility (CF) i.e. CETP, Common Spray dryer, Common MEE, CHWIF etc.							
		Name of Common facility (CF) (For waste water treatment)							
		Common Spray Drying Facility membership of Umiya Enviro Project LLP							
		is taken.							
		Membership of Common facility (CF) mentioning total capacity, consented							
		quantity, occupied capacity and spare capacity and norms of acceptance of							
		effluent from member unitsin-line with the direction given by GPCB vide							
		Letter No. GPCB/P-1/8-G (5)/550706 dated 08/01/2020.							
		Common Spray Drying Facility membership of Umiya Enviro Project LLP							
		is taken. Common spray drying facility is a newly started booking and							
		having GPCB CTE.							
	D-7	Simplified water balance diagram with reuse / recycle of waste water							
		WATER BALANCE							
		Intake							
		., 10.8							
		$\downarrow 1.0 \qquad \downarrow 1.2 \qquad \downarrow 8.6$ Domestic $\downarrow \rightarrow$ Gardening Industrial							
		STP 2.1 J 3.0 J 2.0 J 1.5 Process Cooling Boiler Washing							
		¥> 3.2 0.3 0.2 1.5							
		5.2							
		ETP U. T Loss with residue							
		Common Spray OR 5.1 Drying BO							
		Facility/Evaporated in premises							
		All figures are in KLD							
-									
-	E	AIR							
	E-1	Brief Note on fuel based Heat energy requirement and worst case scenario							
		thereof:							
	a. Dryi	ng of powder: 100 °C to 150 °C for fivehours							
	b. Dist	illation of Solvent: 70 °C to 100 °C for sixhours							
	c. Eva	porator (ETP) : 100 °C to 150 °C for four-fivehours							
	Energy requ	uired: 2000KCal/day							
	Fuel Energy	/ generation: 2860 Kcal/day (100 % efficiency)							
ļ	: 2000 Kcal	/day (70 % efficiency)							
	E-2	Flue gas emission details							
		NO. OF BOIIERS/IFH/FURNACES/DG SETS ETC. WITH CAPACITIES VIZ. IPH, KCal/hr, MT/hr, KVA etc.							

		Stock				
Sr. No.	Stack Attached to	Heigh t (m)	Fuel Used	Quantity of Fuel	APCM	Pollutants
1	Boiler (0.5 TPH)	12	Natural Gas	140 SCM/hr.	Dust Collector	Particulate Matter
2	Thermopack (3 Lac. Kcal)	30	Natural Gas	35 SCM/hr		(150mg/Nm3 SOx (100ppm)
3	DG Set (125KV)	15	LDO / Diesel	50 Lit /Hr	Adequate stack height	NOx (50ppm
E-3	Process gasi.e.	Type of pollu	tant gases (SO _{2,} H	ICI, NH ₃ , CI ₂ , NO _x etc.)		
There is n	o process gas emis	sion from	manufactur	ing process.		
Note:						
	etails of assocus	raw mat	oriale usod	in proposed p	roject ·NA	
		naw mai				
> E	stimation of proce	ess gas e	emission (P	roduct wise an	d Total):NA	
> R	equirement of the	e scrubbi	ng media (I	KL per Dav) co	nsiderina sol	ubility (Product
					noidening eei	ubility (Floduct
W	ise and Total): N	A				ubility (Floduct
W > Y	ise and Total): N	A of all blee	ed liquors (l	MT/KI per Ann	num) as ment	ioned above and its
W > Ye	ise and Total): N early generation	A of all blee	ed liquors (I	MT/KL per Anr	num) as ment	ioned above and its
W > Yo so	ise and Total): N early generation bund management	A of all blee nt in HW	ed liquors (I matrix :NA	MT/KL per Anr	num) as ment	ioned above and its
₩ > Ye sc E-4	ise and Total): N early generation bund managemen Fugitive emis	A of all blee nt in HW ssion deta	ed liquors (I matrix :NA ails with its	MT/KL per Anr	num) as ment	ioned above and its
wi ≻ Yo sc E-4 Following	ise and Total): National Strategy generation bund management Fugitive emistics Measures will for	A of all blee nt in HW ssion deta take for c	ed liquors (I matrix :NA ails with its controlling d	MT/KL per Anr mitigation mea	num) as ment asures. n of proposed	ioned above and its
W > Ye sc E-4 Following	ise and Total): National early generation bund management Fugitive emistics Is Measures will for Maintaining the	A of all blee nt in HW ssion deta take for c e house k	ed liquors (I matrix :NA ails with its controlling d keeping reg	MT/KL per Anr mitigation mea luring operation ularly	num) as ment isures. n of proposed	ioned above and its
₩ > Ye sc E-4 Following	ise and Total): National pound management Fugitive emistic S Measures will Maintaining the Transferring th	A of all blee nt in HW ssion deta take for c e house k e liquid n	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by	MT/KL per Anr mitigation mea luring operation ularly pump	num) as ment isures. n of proposed	ioned above and its
wi ≻ Yo sc E-4 Following	ise and Total): National pound management Fugitive emist Is Measures will Maintaining the Transferring the To carry out re	A of all blee nt in HW ssion deta take for c e house k e liquid n gular lea	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by k detection	MT/KL per Anr mitigation mea uring operation ularly pump and repair act	num) as ment isures. n of proposed	ioned above and its
vi ≻ Yo sc E-4 Following	ise and Total): National pound management Fugitive emise (Fugitive emise) (Fugitive emise)	A of all blee nt in HW ssion deta take for c e house k e liquid n gular lea	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by k detection e of equipm	MT/KL per Anr mitigation mea luring operation ularly pump and repair action	num) as ment nsures. n of proposed ivities e likelihood o	ioned above and its
wi ≻ Yo sc E-4 Following ∙ Pi F	ise and Total): National early generation bund management Fugitive emise s Measures will Maintaining the Transferring the To carry out re roper routine main	A of all blee nt in HW ssion deta take for c e house k e liquid n gular lea intenance	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by k detection e of equipm	MT/KL per Ann mitigation mea luring operation ularly pump and repair action ent reduces th	num) as ment asures. n of proposed ivities e likelihood o	ioned above and its
vi ≻ Ye sc E-4 Following F	ise and Total): National States and Total): National States and Total States and Total States and Transferring the Transferring the To carry out reproper routine main (As per the Hazar States and St	A of all blee nt in HW ssion deta take for c e house k e liquid n gular lea intenance vaste dous and O	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by k detection e of equipm	MT/KL per Ann mitigation mea luring operation ularly pump and repair action ent reduces th	num) as ment isures. n of proposed ivities e likelihood c	ioned above and its
vi ≻ Yo sc E-4 Following ∙ Pi F	ise and Total): National early generation bund management Fugitive emiss is Measures will f Maintaining the Transferring th To carry out re roper routine main Hazardous w (As per the Hazar Note:	A of all blee nt in HW ssion deta take for c e house k e liquid n gular lea intenance vaste dous and Of	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by k detection e of equipm	MT/KL per Ann mitigation mea luring operation ularly pump and repair acti ent reduces th	num) as ment asures. n of proposed ivities e likelihood o	tioned above and its
vi ≻ Yo sc E-4 Following • Pi F	ise and Total): National States and Total): National States and Total): National States and Total States and Transferring the Transferring the Totarry out report routine main that and the Albert Alb	A of all blee nt in HW ssion deta take for c e house k e liquid n gular lea intenance vaste dous and Of ties for H	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by k detection e of equipm ther Wastes (Ma	MT/KL per Ann mitigation mea luring operation ularly pump and repair acti ent reduces th anagement and Tran	num) as ment isures. n of proposed ivities e likelihood o nsboundary Move	ioned above and its d project. of leaks ment) Rules 2016. Processing,
vi ≻ Ye sc E-4 Following ∙ Pi F	ise and Total): National early generation bund management Fugitive emiss is Measures will for Maintaining the Transferring the To carry out re roper routine main Hazardous wa (As per the Hazar Note: Prioritional Reuse	A of all blee nt in HW ssion deta take for c e house k e liquid n gular lea intenance vaste dous and Of ties for H e/Recycle	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by k detection e of equipm ther Wastes (Ma W Manage e within pre	MT/KL per Ann mitigation mea luring operation ularly pump and repair act ent reduces th anagement and Tran ment: Pre-proc mises, Sell our	num) as ment isures. n of proposed ivities e likelihood c nsboundary Move cessing, Co-F t to actual us	ioned above and its d project. of leaks ment) Rules 2016. Processing, ers having Rule-9
vi ≻ Ye sc E-4 Following F	ise and Total): National early generation ound management Fugitive emiss is Measures will f Maintaining the Transferring th To carry out re roper routine main Hazardous w (As per the Hazar Note: Prioriti Reuse permi	A of all blee nt in HW ssion deta take for c e house k e liquid n gular lea ntenance vaste dous and Of ties for H e/Recycle ssion, TS	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by k detection e of equipm ther Wastes (Ma W Manage e within pre SDF/CHWIF	MT/KL per Anr mitigation mea luring operation ularly pump and repair acti ent reduces th anagement and Tran ment: Pre-proc mises, Sell our H.	num) as ment isures. n of proposed ivities e likelihood o nsboundary Move cessing, Co-F t to actual us	ioned above and its d project. of leaks ment) Rules 2016. Processing, ers having Rule-9
vi ≻ Yo so E-4 Following • Pi F	ise and Total): National States and Total): National States and Total States and Total States and Total States and Transferring the To carry out represent routine main that and the Transferring the To carry out represent and the Total States and the Total State	A of all blee nt in HW ssion deta take for c e house k e liquid n gular lea ntenance vaste dous and Of ties for H e/Recycle ssion, TS tification	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by k detection e of equipm ther Wastes (Ma W Manage e within pre SDF/CHWIH of hazardo	MT/KL per Ann mitigation mea luring operation ularly pump and repair acti ent reduces th anagement and Tran ment: Pre-proc mises, Sell our I. us waste shall	num) as ment asures. n of proposed ivities e likelihood o nsboundary Move cessing, Co-F t to actual use be based on	ioned above and its d project. of leaks ment) Rules 2016. Processing, ers having Rule-9 mass balance and
vi ≻ Yo so E-4 Following • Pi F	ise and Total): National States and Total): National States and Total States and Total States and Total States and Transferring the Transferring the Transferring the To carry out represent routine main and the Maintaining the Total States and Transferring the Total States and Transferring the Total States and T	A of all blee nt in HW sion deta take for c e house k e liquid n gular lea ntenance raste dous and Of ties for H e/Recycle ssion, TS tification lations sh	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by k detection e of equipm ther Wastes (Ma W Manage e within pre SDF/CHWIF of hazardoo nall be incon	MT/KL per Ann mitigation mea luring operation ularly pump and repair acti ent reduces th anagement and Tran ment: Pre-proc mises, Sell our H. us waste shall porated in EM	num) as ment asures. n of proposed ivities e likelihood o nsboundary Move cessing, Co-F t to actual us be based on P details sep	ioned above and its d project. of leaks ment) Rules 2016. Processing, ers having Rule-9 mass balance and arately.
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vvi > Ye sc E-4 Following • Pr	ise and Total): National States in the series of the serie	A of all blee nt in HW ssion deta take for c e house k e liquid n gular lea ntenance vaste dous and Of ties for H e/Recycle ssion, TS tification lations sh osal to sc	ed liquors (I matrix :NA ails with its controlling d keeping reg naterials by k detection e of equipm ther Wastes (Ma W Manage e within pre SDF/CHWII of hazardoo nall be incon	MT/KL per Ann mitigation mea luring operation ularly pump and repair acti ent reduces th anagement and Tran ment: Pre-proc mises, Sell our H. us waste shall porated in EM s/vendors/trade	num) as ment asures. n of proposed ivities e likelihood of hsboundary Move cessing, Co-F t to actual use be based on P details sep ers is not allo	ioned above and its d project. of leaks ment) Rules 2016. Processing, ers having Rule-9 mass balance and arately. wed

Types of Waste ETP Sludge Process Organic Sludge Spent Solvent (Recycling in next batch) Spent Solvent (Sold to having	Source ETP Process Process	Hazardous Waste Category 35.3 28.1 28.6	Quantity (MT / Year) 15.0 MT/Year 25.0 MT/Year 1620 MT/Year	Mode of Disposal Collection, storage, Transportation and Dispose to Active TSDF Site Collection, Storage, Transportation and Dispose to CHWIF Collection, Storage, and recycling in
ETP Sludge Process Organic Sludge Spent Solvent (Recycling in next batch) Spent Solvent (Sold to having	ETP Process Process	35.3 28.1 28.6	15.0 MT/Year 25.0 MT/Year 1620 MT/Year	Collection, storage, Transportation and Dispose to Active TSDF Site Collection, Storage, Transportation and Dispose to CHWIF Collection, Storage, and recycling in
Process Organic Sludge Spent Solvent (Recycling in next batch) Spent Solvent (Sold to having	Process Process	28.1 28.6	25.0 MT/Year 1620 MT/Year	Collection, Storage, Transportation and Dispose to CHWIF Collection, Storage, and recycling in
Spent Solvent (Recycling in next batch) Spent Solvent (Sold to having	Process	28.6	1620 MT/Year	Collection, Storage, and recycling in
Spent Solvent (Sold to having				next batch
Rule 9 permission)	Process	28.6	5 MT/Year	Collection, Storage, Transportation and Sold to the actual user having Rule 9 permission.
Distillate Residue	Process	20.3	25 MT/Year	Collection, Storage, Transportation and Dispose to CHWIF
Used Oil	Machinery	5.1	0.010 MT/Year	Collection, storage, Reuse within premises.
Discarded Container/ Bags	Raw material	33.1	6.0 MT/Year	Collection, storage, Transportation and Dispose to Registered Recycler
Spent Carbon	Process	28.3	5 MT/Year	Collection, storage, Transportation and Dispose to CHWIF
	Used Oil Discarded Container/ Bags	Used OilMachineryDiscarded Container/ BagsRaw materialSpent CarbonProcess	Used OilMachinery5.1Discarded Container/ BagsRaw material33.1Spent CarbonProcess28.3	Used OilMachinery5.10.010 MT/YearDiscarded Container/ BagsRaw material33.16.0 MT/YearSpent CarbonProcess28.35 MT/Year

F-3	Deta (MSW	ails of Non-Haza	p of TSDF sit irdous waste	& its	disposal	Non H recycli sold to	azardous ng waste will to the registered	
						recycle	er.	
	Sr. no.	Type/Name of Other wastes	Specific Source of generation (Name of the Activity, Broduct etc.)	(N	Quantity IT/Annum)	Managemon of Wastes	ent	
	1	MSW	STP & OWC	2.0	MT/Month	Used as manure fo green belt developme or sold to actual use	r ent rs.	
	Calu							
G	5010	ent managemei	nt, voc emis	sions	etc.			
G-1	Brief Note on types of solvents, Details of Solvent recovery, % recovery, reuse							
	of recovered Solvents etc.							
		Solvent	Requirem T/Montl	ent h	Fresh Use T/month	Recycle Use T/month	% Recovery	
		Acetone	57.1		3.0	54.1	94.75	
		Toluene	46.4		6.0	40.4	87.07	
		Butanol	17.817	,	1.74	16.071	90.20	
		Ethyl Acetate	35.546	5	2.364	33.182	93.35	
		Hexane	0.909		0.036	0.873	96.04	
		ChloroBenzald ehvde	0.909		0.732	0.0873	95.97 96.04	
		Dioxane Total	35.455 212.318	6 8	1.365 15.279	34.090 197.039	96.15	
	Brick	Noto on LDAD	proposed					
G-2	DIIEI		proposeu.					
G-2	arom							
G-2 LDAR Pro	gram							
G-2 LDAR Pro • So	lvent lo	sses monitoring	1					
G-2 LDAR Pro • So • In	lvent lo warding	sses monitoring g, storage and c) onsumption (of solv	vents in vario	us products	shall be	
G-2 LDAR Pro • So • In • me	vgrann vlvent lo warding ∌asured	sses monitoring g, storage and c l through Level ⁻) onsumption o Transmitters	of solv and L	vents in varic .oad cells we	us products ighing syste	shall be ms resp. The	
G-2 LDAR Pro • So • In me qu	vgrann vlvent lo warding ≽asured antity at	sses monitoring g, storage and c l through Level ⁻ t each stage sha) onsumption o Transmitters all be reconci	of solv and L iled pe	vents in varic .oad cells we eriodically to	us products ighing syste arrive at Los	shall be ms resp. The sses.	
G-2 LDAR Pro • So • In • me qu • Ba	vgram vlvent lo warding asured antity at tch outr	sses monitoring g, storage and c l through Level ⁻ t each stage sha puts shall be mo	onsumption of Transmitters all be reconcionitored and	of solv and L iled pe recon	vents in varic oad cells we eriodically to ciled with ou	us products ighing syste arrive at Los antity of inpu	shall be ms resp. The sses. it raw material	
G-2 LDAR Pro • So • In me qu • Ba ad	vgram warding easured antity at tch outp ded. An	sses monitoring g, storage and c l through Level ⁻ t each stage sha puts shall be mo ny variation beyo	onsumption of Transmitters all be reconci onitored and i ond 5% shall	of solv and L iled po recon be ar	vents in varic oad cells we eriodically to ciled with qu nalysed in de	us products ighing syste arrive at Los antity of inpu tail and actic	shall be ms resp. The sses. It raw material on plan shall b	
G-2 LDAR Pro • So • In me qu • Ba ad	Vivent lo warding asured antity at tch outp ded. An	sses monitoring g, storage and c l through Level ⁻ t each stage sha puts shall be mo ny variation beyo to reduce the va	onsumption of Transmitters all be reconci onitored and i ond 5% shall ariation.	of solv and L iled po recon be ar	vents in varic oad cells we eriodically to ciled with qu nalysed in de	us products ighing syste arrive at Los antity of inpu tail and actic	shall be ms resp. The sses. It raw material on plan shall b	

(PII • Peri	D) sensor te	echnology) s	hall be carried	out at the shop	floor.				
 Peri 									
	odic Leaka	age Audit at	Plant and PDC	CA approach to be followed for control of					
leak	leakages θ Preventive Maintenance .								
In order to prevent leakage from Pump, Seals, Valves etc, preventive maintenance									
sha	shall be carried out periodically as per plan. In case of any recurring problem, acti								
plar	plan shall be prepared or frequency shall be revised. θ Immediate Corrections in								
case	e of Leaka	ges.							
Plar	nt shall hav	e an interna	l competent te	am of Technicia	ans and Engineers to	b hand			
diffe	erent types	of leakages	round the cloc	k.					
 Plar 	nt shall also	o maintain a	dequate numbe	er of spares and	d consumables requ	ired to			
repa	air the leaki	ing device.							
Plar	nt shall also	have comp	etent contracto	or team to hand	le Leakages and ca	n repai			
the	same imme	ediately.Star	ndbyequipment	t like Pumps, va	alves etc shall be ke	pt basi			
the	criticality a	nd usage. P	lant shall also l	nave access eq	uipment like Boom I	ift to			
han	dle leakage	es at height	immediately						
G-3	VOC emi	ssion source	es and its mitig	ation measures	3				
Regular	r monitoring				37316111.				
Regular					System.				
Regular	SAFETY	details			System.				
Regular H H-1	SAFETY Details re	details	rage of Hazard	ous chemicals	System.				
Regular H H-1	SAFETY Details re (For tank sto	details egarding sto	rage of Hazard	ous chemicals					
Regular H H-1	SAFETY Details re (For tank sto	details egarding sto prages only include id raw mater	rage of Hazard	ous chemicals spent solvent tanks) e in drums of ca	arboys.				
 Regular H H-1 F There shall 	SAFETY Details re (For tank stor <u>All liqui</u> no Storage	details egarding sto orages only includ id raw mater e tank propo	rage of Hazard ding spent acid and s <i>ials are storage</i> used in premise	ous chemicals spent solvent tanks) e in drums of ca	arboys.				
 Regular H H-1 F There shall Sr.no 	SAFETY Details re (For tank stor <u>All liqui</u> no Storage Name of	details egarding sto orages only includ id raw mater e tank propo	rage of Hazard ding spent acid and s <i>ials are storage</i> psed in premise Capacity of	ous chemicals spent solvent tanks) e <i>in drums of ca</i> es.	arboys.				
 Regular H H-1 F There shall Sr.no . 	SAFETY Details re (For tank sto <u>All liqui</u> no Storage Name of	details egarding sto orages only includ id raw mater e tank propo	rage of Hazard ding spent acid and s <i>ials are storage</i> osed in premise Capacity of Tank	ous chemicals spent solvent tanks) e <i>in drums of ca</i> es. Number of Tanks	Arboys. Hazardous Characteristicsof				
Regular H H-1 There shall Sr.no .	SAFETY Details re (For tank sto <u>All liqui</u> no Storage Name of	details egarding sto prages only include and raw mater e tank propo	rage of Hazard ding spent acid and s <i>tials are storage</i> osed in premise Capacity of Tank	ous chemicals spent solvent tanks) e <i>in drums of ca</i> es. Number of Tanks	Arboys. Hazardous Characteristicsof Chemical				
 Regular H H-1 There shall Sr.no 	SAFETY Details re (For tank stor <u>All liqui</u> no Storage Name of	details egarding sto orages only includ id raw mater e tank propo	rage of Hazard ding spent acid and s <i>ials are storage</i> psed in premise Capacity of Tank	ous chemicals spent solvent tanks) e <i>in drums of ca</i> es. Number of Tanks	arboys. Hazardous				
Regular H H-1 There shall Sr.no . 1	SAFETY Details re (For tank sto <u>All liqui</u> no Storage Name of NA	details egarding sto orages only includ id raw mater e tank propo	rage of Hazard ding spent acid and a rials are storage sed in premise Capacity of Tank NA	ous chemicals spent solvent tanks) <u>e in drums of ca</u> es. Number of Tanks NA	Arboys. Hazardous Characteristicsof Chemical NA				
Regular H H-1 There shall Sr.no 1 Brief note c	SAFETY Details re (For tank sto <u>All liqui</u> no Storage Name of NA	details egarding sto prages only includ id raw mater e tank propo Chemical	rage of Hazard ding spent acid and s <i>tials are storage</i> bsed in premise Capacity of Tank NA <u>S chemicals in</u>	ous chemicals spent solvent tanks) e in drums of ca es. Number of Tanks NA Tanks	Arboys. Hazardous Characteristicsof Chemical NA				
 Regular H H-1 There shall Sr.no . 1 Brief note co <u>All I</u> 	SAFETY Details re (For tank sto <u>All liqui</u> no Storage Name of NA no storage	details egarding sto orages only includ id raw mater e tank propo Chemical of Hazardou naterials are	rage of Hazard ding spent acid and a <i>tials are storage</i> bsed in premise Capacity of Tank NA <u>s chemicals in storage in dru</u>	ous chemicals spent solvent tanks) <u>e in drums of ca</u> es. Number of Tanks NA <u>Tanks</u> <u>ms of carboys.</u>	Arboys. Hazardous Characteristicsof Chemical NA				
 Regular H H-1 There shall Sr.no . 1 Brief note construction Brief note construction 	SAFETY Details re (For tank sto <u>All liqui</u> no Storage Name of NA <u>NA</u> <u>NA</u>	details egarding sto orages only includ id raw mater id r	rage of Hazard ding spent acid and s <i>ials are storage</i> osed in premise Capacity of Tank NA <u>s chemicals in storage in drun</u>	ous chemicals spent solvent tanks) e in drums of ca es. Number of Tanks NA <u>Tanks</u> <u>ms of carboys.</u> her than Tanks	Arboys. Hazardous Characteristicsof Chemical NA	Carboy			
 Regular H H-1 There shall Sr.no . 1 Brief note of Bags etc. 	SAFETY Details re (For tank store All liquit no Storage Name of NA NA NA	details egarding sto orages only include id raw mater e tank propo Chemical of Hazardou naterials are of Hazardou	rage of Hazard ding spent acid and s <i>ials are storage</i> osed in premise Capacity of Tank NA <u>s chemicals in</u> <i>storage in dru</i> s chemicals ot	ous chemicals spent solvent tanks) <u>e in drums of ca</u> es. Number of Tanks NA <u>Tanks</u> <u>ms of carboys.</u> her than Tanks	Hazardous Characteristicsof Chemical NA	Carboy			
 Regular H H-1 There shall Sr.no . 1 Brief note of Bags etc. Stora detai 	SAFETY Details re (For tank sto <u>All liqui</u> no Storage Name of NA <u>no storage of iquid raw n on storage of Second</u>	details egarding sto prages only include and raw mater e tank propo Chemical of Hazardou naterials are of Hazardou Name of m Hazardous	rage of Hazard ding spent acid and a <i>tials are storage</i> osed in premise Capacity of Tank <u>NA</u> <u>s chemicals in</u> <u>storage in dru</u> <u>s chemicals ot</u>	ous chemicals spent solvent tanks) e in drums of ca es. Number of Tanks NA <u>Tanks</u> ms of carboys. her than Tanks Remarks	Arboys. Hazardous Characteristicsof Chemical NA i.e. Drum, Barrels, C	Carboy			

Safe	ety deta	ils of Haza	ardous Chemicals:	
Тур	be of		Safety measures	
Ha	zardou	S		
Ch	emicals	5		
Sol	vent	 	solated Storage Area, Clo Point, PPEs, Fire Hydra proposed.	sed Auto pump for transferring, Assemblin nt System, occupational Heath room
) H-2	> Арр	licability o Types o (Hydrogena	of PESO : f hazardous Processes inv ation process, Nitration process, Chl	olved and its safety measures: prination process, Exothermic Reaction etc.)
- Тур	be of Pi	rocess	Safety measures inclu	ling Automation
Dis	tillation		Checking of Leakages	Temperature and Pressure Controller
H-3		Details of	of Fire Load Calculation	
1	Nam	e & Addre	ess of factory	REMISSION PHARMA CARE PV Survey No. 300, Plot No. 2, Moje: Indrad, Tal: Kadi, Dist: Mehsana, Gujarat - 382 715
2	Phor	ne Numbe	r	9904525194
				Email: remissionpharmacare@gm
3	Nam	e of occu	pier	 Mr. Tarunkumar Patel Mrs. Renuka Patel
4	Tota	I Floor of t	the factory	02
5	Deta	il of Comb	oustible Area (In sq. Meter	. 80
-	Tota	l Floor are	28	1706 sq.mt
а	1	Open space Area in which Combustible Material stored		0.00 m ²
a b	Oper Mate	erial stored		
a b c	Oper Mate Area	erial stored	ore than 15 meter Height	0.00 m ²

6	(a + b + c + d) / 20	85.3 L/Min
7	Total Requirement of Water (based on area in sr. no-6)	10,236 liter
8	Proposed Water storage Capacity for fire hydrant	100,000 liter
9	Underground Tank + over head tank + On ground Tank	100,000 + 10,000 + 10,000 = 120,000 liter
10	In case of fire, Arrangement for water to be used in fire fighting	120,000 liter
а	Is Hydrant Line available? if yes give dimension of pipe.	Yes 15cm
b.	Which type of arrangement are available for supply water on ground or upper floor i.e. Pipe line and it's Diameter (c.m) Give detail	Fixed Pipe line with flexible pipe providence at storage area, manufacturing process and utility. Diameter of pipe line shall 10 cm
C.	Are fire water pump available or Not? Give detail	Yes, 5 HP Submersible Pump
10.	If the value of sr.6 is more than 550, then requirement of trailer pump is applicable. if it applicable then what is arrangement for the same. give detail	Sr. 6 value is 85.3 L/Min
11.	How many water buckets required?	60
12.	How many 9 Liters water type Extinguisher required? (water Bucket/6)	Fire Extinguisher required (9 Liter Water) = 30/6= 5
		Bucket may be dispensed with provided supply of extinguisher is double than indicate above = $05 + 05 = 10$
13	Requirement of 5 kg CO ² type fire Extinguisher for class-E fire. Floor wise	22 Nos.
	Total requirement of fire extinguishers (5 kg	22 Nos
	ABC).	52 INUS.

14	Details of installed fire extinguishers.						
	Sr. No	No Types of fire Extinguishers		re shers]		
	1	ABC	10		-		
	2	CO2	22				
	3	Sand Bucket	12				
	4	Foam	03		-		
	5	DCP	03				
	6	TOTAL	50				
15.	Additiona Required	al Fire Extinguishers	If Requi	red as per fire nendation	NOC or authority		
16.	Emerger each Flo each Flo	ncy Fire Exit provided to or? Ladder provided to or?	Yes (01 Yes (01	Fire exit will pladder will pro	provide at each Floc pvide at each Floor)	r)	
17.	Arranger Hooter/ I	ment for Fire warning; I.e. Electric Bell / Other	Unit will	be provide ar	n Electric Bell		
18.	Water S	orinkler Provided?	Water S are, util	Sprinkler propo ty.	osed at storage area	ı, producti	
H-4	De	etails of Fire NOC/Certificat	te:				
After	obtaining	EC applied for Fire NOC. F	Fire Hydra	int System will	l be installed as per		
requi	rement of	Fire NOC.		(0) (0)			
H-5	De	etails of Occupational Heal	th Centre	(OHC):			
•	A docto	r will be appointed to check	k the heal	th of workers a	and staff twice in a y	/ear.	
•	First aid	Box will be provided.					
•	Medical	facility will be provided as	on requir	ement.			
•	Occupa	tional health centre will be	strengthe	ned to provide	e emergency and		
	noneme	ergency treatment, by way	of emerge	ency first aid o	n site, liaison with lo	ocal	
	hospital	hospitals and specialists, arranging decontamination of victims, arranging transport of					
		victims to hospitals, and to transfer medical records, and to provide details of incident					
	victims	to hospitals, and to transfe	r medical	records, and t	o provide details of	incident	
	victims t and mee	to hospitals, and to transfe dical history to next care pr	r medical rovider.	records, and t	o provide details of	incident	
	victims t and mee Numbe	to hospitals, and to transfe dical history to next care pr er of permanent Employee	r medical rovider.	records, and t	o provide details of	incident	
	victims t and me Numb Numb	to hospitals, and to transfe dical history to next care pr er of permanent Employee er of Contractual person/La	r medical rovider. : abour :	records, and t	o provide details of		

Number of First Aid Boxes :	3	
Nearest General Hospital :	Kalol&Kadi	
Name of Antidotes to be store in plant :	"universal antidote" (2 parts	
	activated charcoal, 1 part	
	tannic acid, and 1 part	
	magnesium oxide)	

- Committee noted that PP presented revised fire load calculation and fire extinguisher details. PP also
 presented member ship certificate of common spray dryer facility of M/s. Umiya Enviro project LLP and
 stated that it will be commissioned after December 2021 and till that they will not commission production
 plant.
- Committee found reply submitted by PP were satisfactory.
- <u>After detailed discussion</u>, <u>Committee unanimously decided to recommend the project to SEIAA</u>, <u>Gujarat for grant of Environment Clearance with the following specific condition:</u>

SPECIFIC CONDITIONS:

- PP shall comply conditions of any subsequent amendment or expansion or change in product mix, after the 30th September 2020, considered as per the provisions in force at that time as mentioned in the Notification vide S.O. 1223 (E) dated 27/03/2020.
- PP shall carry out proposed project/activities in respect of Active Pharmaceutical Ingredients (API) as per the amended EIA Notification vide S.O. 1223 (E) dated 27/03/2020 and any subsequent amendments.
- PP shall submit six monthly compliance report of Environmental Clearance without fail and the same shall be critically assessed by the regulatory authority.
- Total number of products manufacturing shall not exceeding two at a given point of time as per the plant capacity shown in plant layout.
- 5. Unit shall install CEMS [Continuous Emission Monitoring System] in line to CPCB directions to all SPCB vide letter no. B-29016/04/06PCI-1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis. [For Small/Large/Medium (Red Category) & Whichever (Air emission & Effluent discharge) is applicable].
- Close loop solvent recovery system with adequate condenser system shall be provided to recover solvent vapours in such a manner that recovery shall be maximum and recovered solvent shall be reused in the process within premises.
- Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines.
 LDAR Logbooks shall be maintained.

- 8. All measure shall be taken to avoid soil and ground water contamination within premises.
- PP shall not commission production plant till common spray dryer facility of M/s. Umiya Enviro project LLP shall be obtained CCA of the Board for acceptance of effluent for evaporation.
- 10. PP shall not dig bore well within premises without permission of CGWA and shall procure raw water from Industrial estate only and shall submit records of it on monthly basis to GPCB regularly.

<u>WATER</u>

- 11. Total water requirement for the project shall not exceed 11.60 KLD. Unit shall reuse 5 KLD of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 6.60 KLD and it shall be met through Industrial estate supply only. Prior permission from concerned authority shall be obtained for withdrawal of water.
- 12. The industrial effluent generation from the project shall not exceed 5.20 KLD.
- 13. Total industrial effluent shall be treated in ETP and RO plant. Then 4.10 KLD, RO permeate shall be reused back in process while 1 KLD, RO reject shall be sent to common spray dryer of M/s. Umiya Enviro project LLP through GPS fitted tanker for evaporation.
- 14. Treated waste water shall be sent to common spray dryer only after complying with the inlet norms of common facilities prescribed by GPCB to ensure no adverse impact on Human Health and Environment.
- 15. Domestic wastewater generation shall not exceed 0.8 KL/day for proposed project and it shall be treated in STP. It shall not be disposed off through soak pit/ septic tank.
- 16. Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during ant shut down of Common spray dryer.

<u>AIR</u>

- 17. Unit shall not exceed fuel consumption and provide APCM and Stack height as mentioned in flue gas matrix.
- 18. Unit shall provide APCM and stack height as mentioned in process gas matrix.

HAZARDOUS & SOLID WASTE

- 19. All hazardous solid waste shall be managed as mentioned in hazardous waste matrix.
- 20. The unit shall submit the list of authorized end users of hazardous wastes along with MoU signed with them at least two months in advance prior to the commencement of production. In the absence of potential buyers of these items, the unit shall restrict the production of the respective items.

GREENBELT AREA

21. The PP shall develop green belt within premises (668 Sq. m i.e. 29.31 % of the total plot area) as per the undertaking submitted before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.

22. Safety & Health:

- a) PP shall obtain PESO permission for the storage and handling of hazardous chemicals.
- b) PP shall provide Occupational Health Centre (OHC) as per the provisions under the Gujarat Factories Rule 68-U.
- c) PP shall obtain fire safety certificate / Fire No-Objection certificate (NOC) from the concern authority as per the prevailing Rules / Gujarat Fire Prevention and Life Safety Measures Act, 2016.
- d) Unit shall adopt functional operations/process automation system including emergency response to eliminate risk associated with the hazardous processes.
- e) PP shall carry out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in the manufacturing area in case of any emergency or accident.
- f) PP shall install adequate fire hydrant system with foam trolley attachment within premises and separate storage of water for the same shall be ensured by PP.
- g) PP shall take all the necessary steps for control of storage hazards within premises ensuring incompatibility of storage raw material and ensure the storage keeping safe distance as per the prevailing guidelines of the concerned authority.
- PP shall take all the necessary steps for human safety within premises to ensure that no any harm is caused to any worker/employee or labour within premises.
- i) Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.
- j) Unit shall never store drum/barrels/carboys of incompatible material/chemical together.
- k) Unit shall provide effective Isolation for Process area and storage of hazardous chemicals.
- PP shall not install storage tank for storage of Hazardous chemicals as proposed by project proponent and all Hazardous chemicals shall be stored in drums/ bags/ cylinders etc only.
- m) Unit shall provide effective fire hydrants, water monitors & foam application system at solvent storage tank farm area. Unit shall provide adequate safety system such as water sprinklers, water curtains, foam pouring system etc. to restrict cascade fire emergency in solvent tank farm.

6.	SIA/GJ/IND2/45809/2019	M/S. Pasupati Industries, Unit-II.	EC-Reconsideration
		Plot No. C-51, GIDC Saykha Industrial Estate, Village:	
		Saykha, Ta: Vagra, Dist: Bharuch392140	

Category of the unit: 5(f)

Project status: New

- Project proponent (PP) submitted online application vides SIA/GJ/IND2/45809/2020 on dated 27/11/2020 for obtaining Environmental Clearance (EC).
- SEIAA issued TOR to PP vide their letter dated 29/04/2020(Auto generated ToR).
- Project proponent has submitted EIA Report prepared by M/s: B.S. Rana based on the TOR issued by

SEIAA.

This is a new unit and now proposed for manufacturing of synthetic organic chemicals as tabulated below: (Revised)

Sr. No.	Product Name	CAS No.	Quantity (MT/ Month)	Use of Product
	<u> </u>	DYES INTERME	DIATES	
1	PAABSA	104-23-4	330	Dyes Manufacturing
	(Para-Aminoazobenzene-4-			
	Sulfonic acid)			
	(Max, Capacity:20 MT/M)			
2	Meta Ureido Aniline	99-09-2		
_	(Max. Capacity:50 MT/M)			
3	4- CAP (4 Chloro 2 Amino	95-85-2		
•	Phenol)			
	(Max. Capacity:50 MT/M)			
4	Aniline 2:5 DSA	98-44-2	-	
•	(Max, Capacity:50 MT/M)	00112		
5	Aniline 2.4 DSA	137-51-9		
J	(Max, Capacity:50 MT/M)			
6	5- ΝΔΡ	121-88-0	-	
U	(Max Capacity:20 MT/M)	121.00-0		
7	4 Sulpho Anthrapilic Acid	98-43-1	-	
'	(Max Canacity:35 MT/M)	30-43-1		
8		121-03-0	-	
0	(Max Capacity:100 MT/M)	121-03-9		
	(Max. Capacity: 100 M1/M) (Pora Nitro Toluono Ortho			
9	2:5 DCPNA	6627-34-5		
	(Max. Capacity:20 MT/M)			
	(2,5 -Dichloro-4-nitroaniline)			
10	4 NAPSA	96-67-3		
	(4 Nitro 2 Aminophenol 6			
	Sulfonic Acid)			
	(Max. Capacity:20 MT/M)			
11	DNSDA	128-42-7]	
	(4-4 Di- Nitro Stilbin 2-2			
	Disulphonic Acid)			
	(Max. Capacity:50 MT/M)			
12	MPDSA	88-63-1]	
	(Meta Phenylene Diamine			
	Sulphonic Acid)			
	(Max. Capacity:50 MT/M)			
13	MPDDSA	137-50-8	1	
-	(Meta Phenvlene diamine -			
	4,6 Disulfonic Acid)			
	(Max. Capacity:50 MT/M)			
14	MAP (beta-Methyl vinvl	90776-59-3	1	
	phosphate)			
	(Max. Capacity:50 MT/M)			
15	Chronotropic Acid	1158-10-7	1	
	(Max. Capacity:50 MT/M)			
16	J-Acid	87-02-5	1	
	0,000		1	

	(Max. Capacity:50 MT/M)				
17	Mix Cleave Acid	51548-48-2	-		
	(Max Capacity:50 MT/M)	01040 40 2			
18	F.C. Acid	119-70-0			
	(Max. Capacity:50 MT/M)				
19	4 SulphoHydrozone	118969-29-			
	(Max. Capacity:50 MT/M)	2			
20	K Acid	118-03-6			
	(Max. Capacity:50 MT/M)		-		
21	S.T.A	117-62-4			
	(Max. Capacity:50 MT/M)	00 54 7	-		
22	Gamma Acid	90-51-7			
22		795 20 9	-		
23		705-30-0			
	(Max Capacity:50 MT/M)				
24	R.R. Acid	90-40-4			
	(Max. Capacity:50 MT/M)	22345-43-6	-		
	N Methyl J-Acid	22010 10 0			
26	SulphoV.S	42986-22-1			
27	DMAVS	26672-24-2			
28	DASA	16803-97-7			
29	Anthraguinone	84-65-1			
30	1 Chloro Anthraquinone	82-44-0			
31	1:5 Di Chloro	82-46-2			
	Anthraquinone				
32	1:8 Di Chloro	82-43-9			
	Anthraquinone				
33	MPD	108-45-2			
	(2-Methyl-2,4-pentanediol)				
34	I oblas Acid		VEC		
		REACTIVED			
35			600	Reactive	
	Reactive black o	12225-26-2		duce are duce used for	
36	Reactive Black 31	12225-26-2 12731-63-4	-	dyes are dyes used for	
36 37	Reactive Black 31 Reactive Black 39	12225-26-2 12731-63-4 68259-02-9		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38	Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix	12225-26-2 12731-63-4 68259-02-9 12225-25-1		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39	Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix Reactive Black WNN	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40	Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix Reactive Black WNN Reactive Red 3.1	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41	Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix Reactive Black WNN Reactive Red 3.1 Reactive Red 21	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42	Reactive Black 3 Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix Reactive Black WNN Reactive Red 3.1 Reactive Red 21 Reactive Red 24 1	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42 43	Reactive Black 3 Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix Reactive Black WNN Reactive Red 3.1 Reactive Red 21 Reactive Red 24.1 Reactive Red 31	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5 12237-00-2		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42 43	Reactive Black 3 Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix Reactive Black WNN Reactive Red 3.1 Reactive Red 21 Reactive Red 24.1 Reactive Red 31 Reactive Red 31	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5 12237-00-2 12226-22.1		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42 43 44	Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix Reactive Black WNN Reactive Red 3.1 Reactive Red 21 Reactive Red 24.1 Reactive Red 31 Reactive Red 45	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5 12237-00-2 12226-22-1 00220-00-0		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42 43 44 45	Reactive Black 3 Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix Reactive Red 3.1 Reactive Red 21 Reactive Red 24.1 Reactive Red 31 Reactive Red 31 Reactive Red 45 Reactive Red 111	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5 12237-00-2 12226-22-1 88232-20-6		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42 43 44 45 46	Reactive Black 3 Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix Reactive Black WNN Reactive Red 3.1 Reactive Red 21 Reactive Red 24.1 Reactive Red 24.1 Reactive Red 31 Reactive Red 45 Reactive Red 111 Reactive Red 120	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5 12237-00-2 12226-22-1 88232-20-6 61951-82-4		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42 43 44 45 46 47	Reactive Black 3Reactive Black 31Reactive Black 39Reactive Black 5/MixReactive Black WNNReactive Red 3.1Reactive Red 21Reactive Red 24.1Reactive Red 31Reactive Red 45Reactive Red 111Reactive Red 120Reactive Red 141	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5 12237-00-2 12226-22-1 88232-20-6 61951-82-4 61931-52-0		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42 43 44 45 46 47 48	Reactive Black 3 Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix Reactive Black WNN Reactive Red 3.1 Reactive Red 21 Reactive Red 24.1 Reactive Red 24.1 Reactive Red 31 Reactive Red 45 Reactive Red 111 Reactive Red 120 Reactive Red 141 Reactive Red 195	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5 12237-00-2 12226-22-1 88232-20-6 61951-82-4 61931-52-0 93050-79-4		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42 43 44 45 46 47 48 49	Reactive Black 3Reactive Black 31Reactive Black 39Reactive Black 5/MixReactive Black WNNReactive Red 3.1Reactive Red 21Reactive Red 24.1Reactive Red 31Reactive Red 45Reactive Red 111Reactive Red 120Reactive Red 141Reactive Red 195Reactive Red 198	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5 12237-00-2 12226-22-1 88232-20-6 61951-82-4 61931-52-0 93050-79-4 145017-98-		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42 43 44 45 46 47 48 49	Reactive Black 3Reactive Black 31Reactive Black 39Reactive Black 5/MixReactive Black WNNReactive Red 3.1Reactive Red 21Reactive Red 24.1Reactive Red 24.1Reactive Red 31Reactive Red 45Reactive Red 111Reactive Red 120Reactive Red 141Reactive Red 195Reactive Red 198	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5 12237-00-2 12226-22-1 88232-20-6 61951-82-4 61931-52-0 93050-79-4 145017-98- 7		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	Reactive Black 3 Reactive Black 31 Reactive Black 39 Reactive Black 5/Mix Reactive Black WNN Reactive Red 3.1 Reactive Red 21 Reactive Red 24.1 Reactive Red 24.1 Reactive Red 31 Reactive Red 45 Reactive Red 111 Reactive Red 120 Reactive Red 141 Reactive Red 195 Reactive Red 198 Reactive Red 218	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5 12237-00-2 12226-22-1 88232-20-6 61951-82-4 61931-52-0 93050-79-4 145017-98- 7 113653-03-		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	
36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	Reactive Black 3Reactive Black 31Reactive Black 39Reactive Black 5/MixReactive Black WNNReactive Red 3.1Reactive Red 21Reactive Red 21Reactive Red 24.1Reactive Red 31Reactive Red 31Reactive Red 111Reactive Red 120Reactive Red 141Reactive Red 195Reactive Red 198Reactive Red 218	12225-26-2 12731-63-4 68259-02-9 12225-25-1 Mixed Dyes 23211-47-4 11099-79-9 72829-25-5 12237-00-2 12226-22-1 88232-20-6 61951-82-4 61931-52-0 93050-79-4 145017-98- 7 113653-03- 5		dyes are dyes used for dyeing protein, cellulose and polyamide fiber	

51	Reactive Red 222	93051-45-7
52	Reactive Red 223	93051-43-5
53	Reactive Red 245	340977-00-
		6
54	Reactive Red 250	125830-49-
		1
55	Reactive Red CD	91-56-5
56	Reactive Yellow 15	12226-47-0
57	Reactive Yellow 18	12226-48-1
58	Reactive Yellow 42	12226-63-0
59	Reactive Yellow 44	12270-91-6
60	Reactive Yellow 57	61969-35-5
61	Reactive Yellow 84	61951-85-7
62	Reactive Yellow 85	71872-81-6
63	Reactive Yellow 86	61951-86-8
64	Reactive Yellow 95	71838-98-7
65	Reactive Yellow 135	77907-38-1
66	Reactive Yellow 145	93050-80-7
67	Reactive Yellow 160	129898-77-
		7
68	Reactive Yellow 186	84000-63-5
69	Reactive Yellow 210	Mixed Dyes
70	Reactive Yellow XLR	5809-16-7
71	Reactive Yellow HEXL	Mixed Dyes
72	Reactive Yellow HE4G	59112-78-6
73	Reactive Yellow W3R	12220-12-1
74	Reactive Yellow RR	93050-80-7
75	Reactive Orange 12	35642-64-9
76	Reactive Orange 13	12225-85-3
77	Reactive Orange 16	12225-83-1
78	Reactive Orange 35	12270-76-7
79	Reactive Orange 84	91261-29-9
80	Reactive Orange 107	90597-79-8
81	Reactive Orange 122	79809-27-1
82	Reactive Orange 2R	79809-27-1
83	Reactive Orange W3R	12220-12-1
84	Reactive Orange R	12220-12-1
85	Reactive Blue 13	12236-84-9
86	Reactive Blue 21	12236-86-1
87	Reactive Blue 39	12225-53-5
88	Reactive Blue 49	12236-92-9
89	Reactive Rlue 160	71872-76-9
<u>an</u>	Reactive Rlue 171	77907-32-5
01	Reactive Rive 10/	93050-78-3
02	Reactive Rive 109	12///8-55-
52	NEAULIVE DILLE 190	1

93	Reactive Blue 203	147826-71-		
٩٨	Reactive Blue 220	9 128416-19-		
54	Reactive Dide 220	3		
95	Reactive Blue 221	93051-41-3		
96	Reactive Blue 222	93051-44-6		
97	Reactive Blue 250	93951-21-4		
98	Reactive Blue FNG	Mixed Dyes		
99	Reactive Blue XLE	2580-78-1		
100	Reactive Brown 11	12225-68-2		
101	Reactive Scarlet W2R	Mixed Dyes		
102	Reactive Violet 46			
103	Reactive Violet ME2RL	Mixed Dyes		
104	Reactive Magenta MERL	Mixed Dyes		
ACID D	YES			
105	Acid Black 2	80316-29-6	600	Acid dyes are used to
106	Acid Black 113	3351-05-1		dye natural protein (wool
107	Acid Black 193	12392-64-2		and silk), synthetic
108	Acid Black 194	61931-02-0		polyamide (nylon)
109	Acid Black 210	99576-15-5		
110	Acid Black 234	157577-99-6		
111	Acid Black 10BX	1820-82-5		
112	Acid Red 97	10169-02-5		
113	Acid Red 131	12234-99-0		
114	Acid Orange 7	633-96-5		
115	Acid Brown 75	8011-86-7		
116	Acid Brown 83	13011-68-2		
117	Acid Brown 355	60181-77-3		
118	Acid Brown 425	119509-49-		
		8		
	SOLVENT	DYES		Solvent dyes are used to
				color organic solvents ,
				hydrocarbon fuels, waxes,
				other hydrocarbon-based
119	Solvent Black 5	11099-03-9	200	nonpolar materials
120	Solvent Black 7	8005-02-5		
		DIRECT DY	ES	
121	Direct Black 22	6473-13-8	600	Direct dyes are used on
122	Direct Black 168	85631-88-5		cotton, paper, leather,
123	Direct Black 179	143549-91-1		wool, silk and nylon
124	Direct Blue 71	4399-55-7		
125	Direct Blue 86	1330-38-7		
126	Direct Blue 199	12222-04-7		
127	Direct Orange 26	3626-36-6		
128	Direct Red 81	9/11/10		

129 130	Direct Red 80 Direct Red 239	8/10/10 60202-35-9	-	
131	Direct Red 253	12222-51-4		
	TOTAL		(2000 SO Dyes + 330 Dyes	
			Intermediates)	

Note:-We have made group wise intermediate products and total quantity of dyes intermediates will not be exceed 330 MT/Month. Dyes will be manufactured 2000 MT/Month.

Brief Note of Product Profile:

- 1. No of Manufacturing Plants: 2 no's
- 2. Brief Note regarding number of Products to be manufactured considering plant capacity:

Maximum 5 products (Dyes) and 3 products (dyes intermediates) can be manufactured simultaneously.

- The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
- The presentation was considered in the video conference meeting dated 12/03/2021.
- During the video conference meeting dated 12/03/2021, the project was appraised based on the information furnished by technical expert of PP, M/s. B.S.Rana. During the meeting, the project was appraised based on the information furnished in the EIA Report, and details presented during the meeting.
- Upon asking regarding QCI/NABET accreditation for preparation of EIA preparation for proposed project, technical expert of PP informed that they have not obtained QCI/NABET accreditation for preparation of EIA/EMP report as per the amended EIA Notification vide S.O. 648 (E) Dated 03.03.2016 and have submitted Honorable High court stay order in EIA report regarding EIA preparation by M/s B.S.Rana , technical consultant of proposed project.
- Committee noted that this is Greenfield project in GIDC Saykha. Source of water supply is GIDC. Looking to
 product profile submitted by technical expert of PP showing total dyes intermediate production capacity is
 2000 MT/Month and product profile presented in presentation showing total dyes intermediate production
 capacity is 330 MT/Month, hence Committee asked for clarification regarding total dyes intermediate
 production capacity mentioned as 2000 MT/Month in prescribed format and 330 MT/Month in presentation.
 Also Committee insisted for submission of adequate product profile and proposal and water, air and
 Hazardous waste details, EMP and changes in EIA report.
- Looking to area adequacy for dirty dyes intermediate products and dyes products manufacturing and project cost mentioned as only 4.5 crore, Committee insisted for revised area adequacy and layout plan with mentioning separate dyes production plant and dyes intermediate plant, adequate size peripheral road, separate total ZLD ETP for dirty dyes intermediate products and another ETP for other dyes intermediate and dyes products, storage of hazardous chemicals considering its type of hazard and as per compatibility chart, 255th meeting of SEAC-Gujarat, Dated 05.08.2021

greenbelt area and all area with dimensional scale in layout plan with land break up. Also Committee insisted for revised waste water treatment proposal and water balance diagram considering separate total ZLD ETP proposal for dirt products as per GPCB circular dated 03/11/2018 and another ETP for rest of products.

- Upon asking regarding primary and secondary data mentioned in EIA report as technical expert of PP is not having QCI/NABET accreditation for preparation of EIA and EMP report, technical expert of PP could not answered regarding primary and secondary data for preparation of EIA report. Hence Committee took seriously regarding it and insisted for submission of details of name of laboratory and organization whom primary and secondary data utilized by technical expert of PP for preparation of EIA/EMP report of proposed project.
- Committee observed that compliance of ToR report submitted by technical expert of PP are distinctly deficient in quality, are not reflecting environmental concerns.

After deliberation, SEAC unanimously decided to defer the proposal and consider the same in one of the upcoming meeting of SEAC after satisfactory submission of following details:

- Clarification regarding total dyes intermediate production capacity mentioned as 2000 MT/Month in prescribed format and presented dyes intermediate production 330 MT/Month in presentation during meeting.
- 2. Revised adequate product profile and proposal and water, air and Hazardous waste details, EMP and subsequent changes in EIA report.
- 3. Revised area adequacy and layout plan with mentioning separate dyes production plant and dyes intermediate plant, adequate size peripheral road, separate total ZLD ETP for dirty dyes intermediate products and another ETP for other dyes intermediate and dyes products, storage of hazardous chemicals considering its type of hazard and as per compatibility chart, greenbelt area and all area with dimensional scale in layout plan with land break up.
- 4. Revised waste water treatment proposal and water balance diagram considering separate total ZLD ETP proposal for dirt products as per GPCB circular dated 03/11/2018 and another ETP for rest of products.
- Details of name of laboratory and organization is having valid NABL accreditation laboratory certificate or not, whom primary and secondary data utilized by technical expert of PP for preparation of EIA/EMP report of proposed project.
- PP submitted the reply of the said points along with other supporting documents.
- This proposal is reconsidered in SEAC meeting dated 31.05.2021. PP along with their technical expert/consultant from M/s B S Rana remains present in the meeting and made presentation before committee.
- During the video conference meeting dated: 31.05.2021, the project was appraised based on the information furnished in the EIA Report and details presented during the meeting.
- The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted for the study area of 10 km radial distance from project site for the period December-2019 to February-2020.

Ambient Air Quality monitoring was carried out PM₁₀, PM_{2.5}, SOx and NOxat Ten locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed. Incremental GLC's for all parameters remain within 500 m from the project site. The resultant concentrations are within the NAAQS. The modelling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).

- Committee noted the following:
 - ✓ Revised product profile mentioning group wise or individual capacity of various dyes & dyes intermediates. At a time, 5 Nos of dyes and 3 Nos of dyes intermediates can be manufactured.
 - ✓ Site Plan/ layout with fire planprovision of separate entry & exit, 4.50 m & 6 m wide peripheral road for emergency exit, OHC, utility, production area, raw material storage area, etc.
 - ✓ Stream wise segregation of effluent will be carried out.
 - Concentrated effluent generated from process will be treated in ETP followed by MEE. MEE condensate will be sent to CETP-Saykha.
 - Dilute effluent will be treated in ETP followed by RO. RO permeate will be reused within premises and RO reject will be sent to CETP-Saykha.
 - ✓ Domestic effluent will be disposed in soak pit.
 - ✓ Coal or lignite or agro waste is proposed as fuel in boiler, HAGs and TFH.
 - PP submitted hazardous waste matrix mentioning source of generation, quantity and Mode of disposal and committed to comply the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
- Committee deliberated on Product profile, Layout plan, Storage details, Process safety, Fire safety, water balance & waste water management, Flue gas and process gas emission & Air Pollution Control System, Hazardous waste matrix, EMP, CER, Green belt, TOR compliances, etc.
- Committee insisted to provide the following details:
 - Site Plan/ layout with dimensional scale for each section of plant area and mentioning adequate size peripheral road for ease movement of fire tender and emergency vehicles, production plant area, greenbelt development area, storage of raw material, finished goods storage of Hazardous chemicals considering its type of hazard and compatibility chart, separate entry and exit etc with area adequacy.
 - ✓ Water balance mentioning treatment of domestic effluent and reuse of MEE condensate within premises and compliance of GPCB circular for dirty products dated: 03.11.2018.
 - \checkmark Flue gas matrix by removing lignite as a fuel.
 - ✓ Details of automatic control system for critical processes.
 - ✓ Membership of TSDF & CHWIF mentioning capacities as per GPCB Circular dated: 08.01.2020.
 - ✓ Details of Personal Protective Equipments for handling of various types of hazardous chemicals.
 - Risk assessment of hazardous chemicals considering worst case scenario with details of affected population.

After deliberation, SEAC unanimously decided to consider the proposal in one of the upcoming meeting of SEAC after satisfactory submission of following details:

- Revised Site Plan/ layout with dimensional scale for each section of plant area and mentioning adequate size peripheral road for ease movement of fire tender and emergency vehicles, production plant area, greenbelt development area, storage of raw material, finished goods storage of Hazardous chemicals considering its type of hazard and compatibility chart, separate entry and exit etc with area adequacy.
- Revised Water balance mentioning treatment of domestic effluent and reuse of MEE condensate within premises maintain ZLD for dirty dyes intermediates in compliance of GPCB circular for dirty products dated: 03.11.2018.
- 3. Revsied Flue gas matrix by removing lignite as a fuel.
- 4. Details of automatic control system for critical processes.
- 5. Membership of TSDF & CHWIF mentioning capacities as per GPCB Circular dated: 08.01.2020.
- 6. Details of Personal Protective Equipments for handling of various types of hazardous chemicals.
- 7. Risk assessment of hazardous chemicals considering worst case scenario with details of affected population.
- 8. Revised EMP including revised air, water, hazardous, etc. components.
- PP submitted the reply of the said points of meeting dated 31.05.2021 along with other supporting documents.
- This proposal is reconsidered in SEAC meeting dated **05.08.2021**. PP along with their technical expert/consultant from M/s B S Rana remains present in the meeting and made presentation before committee.
- PP submitted revised salient features of water, air and Hazardous waste management are as under,

S	r. no.	Particulars						Deta	ails	
A	-1	Total cost of	Propos	ed Proj	ject					
		(Rs. in Crore	es):							
			То	otal Pro	ject Cost					
				4	4.5Crores					
		Break-up of	propose	ed proje	ect Cost:					
				De	etails	Proiect (Cost			
						(Rs. In Cr	ores)			
				Land &	& building	1.8	,			
			P	Plant &	Machinery	1.7				
				E	MP	0.7				
				0	other	0.3				
				Т	otal	4.5				
A	-2	Details of Er	nvironme	ental M	anagement	Plan (EMP)		As b	below:	
	Sr. No.	Unit	Det	ail	Capital Cost (Rs.	Operating Cost (Rs.	Mainter nce Co	na ist	Total Recurring	

				In Crore	es) In C	Crores)	(Rs. In Crores)	In Crores
	1	Waste Water	ETP	0.3	().11	0.03	0.14
	2	Air	APCM	0.1	(0.07	0.02	0.09
	3	Hazardous Managemen t	Separate room, membership & Disposal	0.01	(0.01	0.01	0.02
	4	Fire & Safety	EPE / Fire hydrate system	0.2	(0.01	0.01	0.02
	5	AWH Monitoring	Stack monitoring /waste water analysis / Soil test / noise test	0.05	().01	0.01	0.02
	6	Green belt Developmen t	Sample fertilizer	0.03	(0.02	0.01	0.03
	7	Occupationa I Health	First aid box	0.01	0	.005	0.003	0.008
							0.09	0.10
	8	CER		0.074	. (0.08	0.06	0.16
Sur	8 mmary	CER Total		0.074	. (2 0	.315	0.08	0.18
Sur	8 mmary	CER Total Cost of Project EMP Capital (Percentage: EMP Recurrin and Percentage	t in Crores per Cost in Crores g Cost in Cror ge:	0.074 0.712 r Annum: per Annur es per An	m and	.315 (1) (1) (1) (1)	0.08 0.173 4.5 0.712 5.77% 0.488 0.84%	0.18
Sur	8 mmary	CER Total Cost of Project EMP Capital (Percentage: EMP Recurrin and Percentage	t in Crores per Cost in Crores g Cost in Cror ge: ER as per OM	dated 01/	m and num	.315 (1 (1	0.08 0.173 4.5 0.712 5.77% 0.488 0.84%	0.18
Sur A-3	8 mmary 3	CER Total Cost of Project EMP Capital (Percentage: EMP Recurrin and Percentage Details of Cl	t in Crores per Cost in Crores g Cost in Cror ge: ER as per OM % as per	0.074 0.712 r Annum: per Annur es per Ann dated 01/ er the OM	m and num	.315 (1) (1) (2) (1) (2) (1) (2) (1) (2) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	0.08 0.173 4.5 0.712 5.77% 0.488 0.84%	0.18
Sur A-3	8 mmary	CER Total Cost of Project EMP Capital (Percentage: EMP Recurrin and Percentage Details of Cl	t in Crores per Cost in Crores g Cost in Cror ge: ER as per OM % as per	0.074 0.712 r Annum: per Annur es per Ann dated 01/ er the OM	m and num 05/2018	.315 (1) (1) (1) (2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	0.08 0.173 4.5 0.712 5.77% 0.488 0.84% es	0.18
Sur A-3	8 mmary	CER Total Cost of Project EMP Capital (Percentage: EMP Recurrin and Percentage Details of Cl	et in Crores per Cost in Crores g Cost in Cror ge: ER as per OM % as per 2 ore than % as	0.074 0.712 r Annum: per Annur es per Ann dated 01/ er the OM 2 % per the O	m and num 05/2018 Rs	3.315 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	0.08 0.173 4.5 0.712 5.77% 0.488 0.84% es es	0.18
A-3	8 mmary 3	CER Total Cost of Project EMP Capital (Percentage: EMP Recurrin and Percentage Details of Cl In case of m	et in Crores per Cost in Crores g Cost in Cror ge: ER as per OM % as per 2 ore than % as	0.074 0.712 r Annum: per Annur es per Annur es per Annur dated 01/ er the OM 2 % per the O	05/2018	3.315 (1) (1) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	0.08 0.173 4.5 0.712 5.77% 0.488 0.84% es es	0.18
Sur A-3	8 mmary 3 ef note	CER Total Cost of Project EMP Capital (Percentage: EMP Recurrin and Percentag Details of Cl In case of m on proposed a anned activities	et in Crores per Cost in Crores g Cost in Cror ge: ER as per OM % as per % as per cre than % as	0.074 0.712 r Annum: per Annur es per Annur es per Annur es per Annur 2 % per the OM	05/2018 05/2018 05/2018 05/2018 00, menti	3.315 .315 (1	0.08 0.173 4.5 0.712 5.77% 0.488 0.84% es	0.18
Sur A-3	8 mmary 3 ef note Pla u sp	CER Total Cost of Project EMP Capital (Percentage: EMP Recurrin and Percentage Details of Cl In case of m con proposed a anned activities nder CER per pecific needs at earest villages	et in Crores per Cost in Crores g Cost in Cror ge: ER as per OM % as per cre than % as activities for CE	0.074 0.712 r Annum: per Annur es per Annur	05/2018 05/20 05/2018 05/20 05/20 05/20 05/20 05/20 05/20 05/20 0	3.315 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	0.08 0.173 4.5 0.712 5.77% 0.488 0.84% es es ame. 5th Year	0.18 0.488
A-3	8 mmary 8 ef note 9 8	CER Total Cost of Project EMP Capital (Percentage: EMP Recurrin and Percentage Details of Cl In case of m e on proposed a anned activities nder CER per pecific needs at earest villages thin study area	et in Crores per Cost in Crores g Cost in Cror ge: ER as per OM % as per % as per cre than % as activities for CF 1 st year (21-22)	0.074 0.712 r Annum: per Annur es per the OM	05/2018 05/2018 05/2018 Rs 05/2018 Rs 05/2018 05/20 05/2018 05/2018 05/20 05/20 05/20 05/	0.08 .315 ((1 (1 (1) (1) (1) (1) (1) (0.08 0.173 4.5 0.712 5.77% 0.488 0.84% es es ame. 5th Year) (25-26)	0.18 0.488

	Sola	r Street Lig 20 Nos.	ht	5,00,000	20,000	20,000	20,000	20,000	5,80,000
		Total		7,40,000	40,000	40,000	40,000	40,000	9,00,000
_		Land / Dia	4	anabia dat	-:!				
В		Land / Plo	ot own	ersnip deta	alis:				
B-1		Plot area							
					Total DI	ot area			
					TULATEN	Ji alea			
					5000 S	iq. m.			
B-2		Brief note	on Ar	ea adequa	acv in line	to propos	sed project	activities:	
-									
			Sr.	D			A	Area	
			No.	De	talls of La	na	For Propo	sed Plant(m²)
			1	Ne	et Plot Are	a	5	5000	
			1	(Produc	ant Buildir tion Area)	ng	11	150.0	
			2	Materia	ls Storage	e Area	5	60.0	
			3	ETP Are	ea & Haza	ardous	2	75.0	
			4	Utility	area		1	40.0	
			5	Green b	elt Area		16	670.0	
			6	OHC				35	
			7	Other (C	Open spac	ce &	11	170.0	
				Road)	al Area		5(000	
				1010					
B-3		Green hel	t araa						
00		Creenber	t arca			Г	Total		
						(Sq.	meter)		
				Area	in	1	670		
				Sq. me	eter				
				% of to	tal	33.4 %	of total area	a	
				alea					
		In case of	GRE	EN-BELT	partly outs	side prem	ises, give o	complete d	etails like
		exact loca	ition (L	_at-Long),	Agreeme	nt/iviou w	ith specific	area etc.	
С		Employme	ent ge	neration					
						Total			
						40]	
		In case of	Indire	ect employ	ment, Giv	e details.			
Р		WATER							
		VVALEN							

D-2 Water consumption (KL	D)	
Catagony	Quantity KLD	Remarks
(C) Domostic	2.5	2.5 KLD Frosh
(B) Cordoning	5.0	2.5 KLD Fresh
(I) Galderling	5.0	2.5 KLD Flesh
	20 2	
	55 5	
	9	
	0	
b) Washi	ng 1	
b) washi		
	0	
	0	
c) Boile	r 2	
	0	
	0	
	0	
d) Coolir	ng 2	
	0	
	0	
e) Scrubb	per 1	
	0	
	0	
Industrial Total	4	
	5	
	0	
	0	
Grand Total (A+B+0		262 Recycle + 195.5 Fresh
	5	
	1	
	5	
Priof Note on worst a	ase scenario for water	consumption:

			195.5			
	Total	l water	100.0			
	requirem	ent for the				
	proje	ect (A)				
	Quant	ity to be	262			
	recyc	led (B)		-		
	Total fre	esh water	457.5			
	require	ment (C)				
	Ensure To Recycled i.e. A = B	otal water red water + C	quirement = Fresh	n water	+	
Reuse [Sourc	Recycle deta	ails (KLD) wi application a	th feasibility. area]			
						- I
	Source of	Application	Characteristic	sof	Remarks	
	waster for	area with	reused (COD		egaruing feasibility	
	reuse in	KLD (Where	e BOD, TDS et	, c.) †	to reuse	
	KLD	it is used)		,		
	(From					
	where it is					
	coming)					
				I		-
D-3	y no reuse/rec	on (KLD)				
	Cate					
		egory	Waste water KLD		Remark	S
	(E) Domesti	egory	Waste water KLD 2.0		Remark To STP	S D
	(E) Domestie (F) Industria	egory	Waste water KLD 2.0		Remark To STP	s D
	(E) Domestie (F) Industria	egory c	Waste water KLD 2.0 418.0		Remark To STP	S
	(E) Domestia (F) Industria a) P b) V	egory c Il Process Vashing	Waste water KLD 2.0 418.0 10.0		Remark To STP	S
	(E) Domestic (F) Industria a) P b) V c) B	egory c Il Process Vashing Boiler	Waste water KLD 2.0 418.0 10.0 2.0		Remark <u>To STP</u> 	S
	(E) Domestic (F) Industria a) P b) V c) B d) C	egory c I Process Vashing Soiler Cooling	Waste water KLD 2.0 418.0 10.0 2.0 1.0		Remark To STP 	S
	(E) Domestin (F) Industria a) P b) V c) B d) C e) S	egory c l Process Vashing Boiler Cooling Scrubber	Waste water KLD 2.0 418.0 10.0 2.0 1.0 8.0		Remark To STP 	S
	(E) Domestia (F) Industria a) P b) V c) B d) C e) S Total Industr	egory c l Process Vashing Soiler Sooling Scrubber rial waste	Waste water KLD 2.0 418.0 10.0 2.0 1.0 8.0 439.0		Remark To STP	S
	(E) Domesti (F) Industria a) P b) V c) B d) C e) S Total Industr	egory c l Process Vashing Boiler Cooling Cooling Corubber rial waste water	Waste water KLD 2.0 418.0 10.0 2.0 1.0 8.0 439.0		Remark To STP	S
	(E) Domestic (F) Industria a) P b) V c) B d) C e) S Total Industr	egory c l Process Vashing Boiler Sooling Scrubber frial waste water al [A + B]	Waste water KLD 2.0 418.0 10.0 2.0 1.0 8.0 439.0 441.0		Remark	S
Brief Note on worst ca	(E) Domesti (F) Industria a) P b) V c) B d) C e) S Total Industr Tota	egory c ll Process Vashing Boiler Cooling Cooling Cooling Cooling Corubber rial waste water al [A + B] for waste wa	Waste water KLD 2.0 418.0 10.0 2.0 1.0 8.0 439.0 441.0 ater generation(Qu	Jalitative	Remark	s
Brief Note on worst ca Total effluent generat KLD will be treated in	(E) Domestic (F) Industria a) P b) V c) B d) C e) S Total Industr Tota ase scenario f ion for propos STP and use	egory c c l Process Vashing Boiler Cooling Cooling Corubber rial waste water al [A + B] for waste wa sed facility w ed for green l	Waste water KLD 2.0 418.0 10.0 2.0 10.0 2.0 418.0 10.0 2.0 410.0 439.0 441.0 ater generation(Question) belt development.	ualitativo	Remark	s

	n concentration effluent generation from proposed project (Whichever is applicat
D-4	Mode of Disposal & Final meeting point
- Domest	c: Soak pit
Industria	al: CETP, Saykha GIDC
- Clearly m	ention about final disposal
Total effl KLD will	uent generation for proposed facility will be 441 KLD. Domestic waste water of 2. be treated in STP and used for greenbelt development.
439 KLD KLD will	Industrial wastewater will be treated in ETP. Generated industrial effluent 423.9 be maintained ZLD by providing MEE in premises. MEE capacity will be 20 KL/H
D-5	Treatment facilities
For Dom	estic waste water:
Total effle KLD will Generate GIDC afte	stream shall be proposed. Jent generation for proposed facility will be 441 KLD. Domestic waste water of 2. De discharge to soak pit. 439 KLD Industrial wastewater will be treated in ETP.
	er treatment to in-house ETP having primary, Secondary & Tertiary treatment un
OR It will	be maintained ZLD by providing MEE in premises. MEE capacity will be 20 KL/F
OR It will <u>Note: (In</u> Manager (Preventi CETP. > A it	be maintained ZLD by providing MEE in premises. MEE capacity will be 20 KL/F <u>case of CETP discharge) :</u> nent of waste water keeping in view direction under section 18 (1) (b) of the Wate on and Control of Pollution) act, 1974 issued by CPCB regarding compliance of S CETP Saykha is a newly proposed CETP and hence there is no existing load a is designed to considering the allotted plot and two of industries
OR It will <u>Note: (In</u> Manager (Preventi CETP. > A it Brief note	be maintained ZLD by providing MEE in premises. MEE capacity will be 20 KL/F <u>case of CETP discharge) :</u> nent of waste water keeping in view direction under section 18 (1) (b) of the Wate on and Control of Pollution) act, 1974 issued by CPCB regarding compliance of s CETP Saykha is a newly proposed CETP and hence there is no existing load a is designed to considering the allotted plot and type of industries.
OR It will <u>Note: (In</u> Manager (Preventi CETP.	be maintained ZLD by providing MEE in premises. MEE capacity will be 20 KL/F <u>case of CETP discharge) :</u> nent of waste water keeping in view direction under section 18 (1) (b) of the Wate on and Control of Pollution) act, 1974 issued by CPCB regarding compliance of s CETP Saykha is a newly proposed CETP and hence there is no existing load a is designed to considering the allotted plot and type of industries. <u>on adequacy of ZLD (In case of Zero Liquid Discharge):</u> case CETP connection is not available maintained ZLD by providing MEE in emises
OR It will <u>Note: (In</u> Manager (Preventi CETP. → A it <u>Brief note</u> → In pt D-6	ar treatment to in-house ETP having primary, Secondary & Tertiary treatment un be maintained ZLD by providing MEE in premises. MEE capacity will be 20 KL/h case of CETP discharge) : nent of waste water keeping in view direction under section 18 (1) (b) of the Wate on and Control of Pollution) act, 1974 issued by CPCB regarding compliance of s CETP Saykha is a newly proposed CETP and hence there is no existing load a is designed to considering the allotted plot and type of industries. on adequacy of ZLD (In case of Zero Liquid Discharge): case CETP connection is not available maintained ZLD by providing MEE in emises. In case of Common facility (CF) i.e. CETP, Common Spray dryer, Common MI CHWIF etc. Name of Common facility (CF) (For waste water treatment)
OR It will <u>Note: (In</u> Manager (Preventi CETP.	a industrial endent 423.9 KLD will be discharged to Common CETP of Saykha er treatment to in-house ETP having primary, Secondary & Tertiary treatment un be maintained ZLD by providing MEE in premises. MEE capacity will be 20 KL/k <u>case of CETP discharge) :</u> hent of waste water keeping in view direction under section 18 (1) (b) of the Wat on and Control of Pollution) act, 1974 issued by CPCB regarding compliance of s CETP Saykha is a newly proposed CETP and hence there is no existing load a is designed to considering the allotted plot and type of industries. <u>• on adequacy of ZLD (In case of Zero Liquid Discharge):</u> case CETP connection is not available maintained ZLD by providing MEE in emises. In case of Common facility (CF) i.e. CETP, Common Spray dryer, Common M CHWIF etc. Name of Common facility (CF) (For waste water treatment)

				Water B	alance			
		2. Domestic 2.(STP Gardeninc pH-6 COD- BOD- TSS- pH-7 COD- BOD- TSS- 50 Re	5 2 2 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5	Water B Intake 45 5 6 6 6 6 6 6 6 6 6 6 6 6 6	alance 7.5 (412.5 Recycle + 5.0 g Indu 20 Cooling E 1 pH-7-8 COD-150 BOD-18 TSS-10 Permeate 4 te ge+ 2	45 Fresh) ↓ 450 (412.5 Recycle + strial ↓ 20 ↓ 10 Boiler ₩ashing ↓ 2 ↓ 1 2 ↓ 1 18.5 PH-7 COD-6450 BOD-1100 TSS-210	37.5 Fresh) 10 10 5 Scrubbing 0 8 10 8 10 8 10 8 10 10 8 10 10 8 10 10 8 10 10 8 10 10 8 10 10 8 10 10 10 8 10 10 10 10 8 10 10 10 10 10 10 10 10 10 155 280 155	
E W W E	-1 /e have <u>e have</u> -2	AIR Brief Note thereof: calculated th considered th Flue gas e No. of Boi MT/hr, KV (In case o mechanis	e on fuel ba ne calorific ne maximu emission de ilers/TFH/F /A etc. f Project lo m publishe	sed Heat energ value of fuel an <u>m use of fuel or</u> etails furnaces/DG se cated within CF d in the MOEF	gy requirement d it will chang n worst case ts etc. with ca PA/SPA , APC CC's OM vide	nt and worst ca ge product prof senerio and Af apacities viz. T CM shall be in e dated 31.10.2	ase scenario File. And hence FCM accordingly PH, Kcal/hr, line to the 2019)	/.
	Sr. no.	Source of emission With Capacity Steam Boiler	Stack Height (meter) 30	Type of Fuel Coal/ Agro- waste	Quantity of Fuel MT/Day 8 MT/Day	Type of emissions i.e. Air Pollutants PM/SO2/ NOx	Air Pollution Control Measures (APCM) Cyclone Separator	
	2	(3TPH) Hot Air Generator – 1 12 Lac K cal.	33	Coal/ Agro- waste	5 MT/Day	PM/SO2/ NOx	Followed by Bag Filter & Water Scrubber Cyclone Separator Followed by Bag Filter & Water	
	3	Hot Air Generator – 2 10 Lac K cal	33	Coal/ Agro- waste	5 MT/Day	PM/SO2/ NOx	Scrubber Cyclone Separator Followed by Bag Filter & Water Scrubber	

	4	F 20	hermic Fluid Ieater) Lac K Cal	33	Coal/Agro- waste	9 MT/Day	P	M/SO2/ NOx	Cyclone Separator Followed by Bag Filter & Water Scrubber
	5	50	9G Set 90 KVA	11	Diesel	12 Lit/Hr	Ρ	M/SO2/ NOx	Adequate Stack Heigh
<u>E</u> -	-3	P	ocess ga	as i.e. Typ	e of pollutant ga	ises (SO _{2,} HC	I, N⊦	1 _{3,} Cl _{2,} NO _x	etc.)
		Sr. no.	Sp Sou emi (Nam Proo Proo	ecific irce of ission e of the duct & cess)	Type of emission	Stack/Ven Height (met	ıt er)	Air Po Control I (AP	ollution Measures CM)
	-	1.	Spray 3.5 (ForP	v Dryer– KL/Hr Process)	Particulate Matter	30		Cyclone + Wet Se Seco Scru	Separator crubber + ndary ibber
		2	Spray 2.5 (For effl	Dryer – KL/Hr Diluted uent)	Particulate Matter	30		Cyclone + Wet So Seco Scru	Separator crubber + ndary ibber
		3	N (I Conce Effl	IEE For entrated uent)	Particulate Matter	30		Cyclone + Wet S	Separator Scrubber
	_	4	Spir D	n flash ryer	Particulate Matter	20		Cyclone + Bag	separator g filter
	-	5	Sulfo	onation	SO2, SO3	20		Two sta and alkal	ge water i scrubber
		6	Nitı	ration	NO2	20		Two sta and alkal	ge water i scrubber
		7	Ami	dation	NH3	20		Two sta scru	ge water Ibber
		8	Chloi	rination	HCI	20		Two sta and alkal	ge water i scrubber
	-	9	Amı	monia	NH3	20		Two sta scru	ge water bber

Estimation of process gas emission (Product wise and Total)

► F	Requirement of wise and Total)	the scrubbing me	dia (KL per Da	y) considering s	solubility (Product
\	Yearly generationsound manager	on of all bleed lique ment in HW matrix	ors (MT/KL pe	r Annum) as me	entioned above and its
E-4	Fugitive en	nission details with ole process will b e line will be hav mp with double m oper ventilation.	its mitigation be carried out ing minimum nechanical se	measures. t in close loop. flange. eals	
F		weete			
F	Hazardous (As per the Movement) Note: ➤ Pric Ret	Hazardous and C Hazardous and C Rules 2016. Drities for HW Man Use/Recycle within	other Wastes (agement: Pre- premises, Sel	Management ar processing, Co Il out to actual u	nd Transboundary -Processing, sers having Rule-9
	→ Qua calo > Dis	antification of haza culations shall be i posal to scrap ven	ncorporated in dors/vendors/	hall be based o EMP details se raders is not all	n mass balance and eparately. owed
F-1	Hazardous	waste managem	ent matrix		
Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity (MT/Annum)	Management of HW
1	ETP Sludge	35.3	34.3	120	Collection,
2	Used oil	5.1	34.3	0.020 (KL)	Collection,
3	Discarded Containers/ Drums/ Liners	33.1	33.3	600	Collection, Transportation, Disposal by selling to authorized recycler.
4	Iron sludge	26.1	5.1	7600	Collection, Rule 9 authority
5	Dilute HCI (30%)	21.1	26.1	8400	Collection, Rule 9 authority
6	Ammonium Hydroxide Solution	26.1	D2 of Sch- II	1800	Collection, Rule 9 authority
7	Sodium Bislufite	26.1	26.10	1300	Collection,

1							-				
		Spent A	Acid			D2 of				Colle Storage	ection, e, Reuse
	8	(35 TO %)	42	21	.1	Sch=II		648	0	K J	Acid, Acid,
										Anthrac	quinone,
	9	Sper Carbo	nt on	-				790)	Collectio fac	on, cility
F-'	2	Mem	bershi	n details	of TSDF	CHWIF etc					
		(For I	HW m	anageme	ent)						
De	etails	of Membe	rship	letter no.	& Date w	vith spare ca	pacity	y of the	e Com	mon Faci	lity.
F-	3	Nembersr Detai	npit Is of N	SDF/CHV	vif Will De	e obtained a	nosal	etting	enviroi	Not ar	earance
	0	(MSV	V and	others)			posai			Not ap	plicable
		Sr.	Тур	e/Name	Specific	; Q	uantity	y	Mana	gement	
		no.	of O	ther	Source	of (MT	/Annu	ım)	of Wa	astes	
			was	165	(Name)	of					
					the Activ	vity,					
					Product						
		1	N	ISW	OW(0.5		Us	ed as	
					& Pap	er			man	nure for	
									gree	en belt	
									dovo	Innmont	
									devel or s	sold to	
									devel or s actua	sold to al users.	
		2	C Sto	Office	Plasti	ic	0.1		devel or s actua Sell	sold to al users.	
		2	C Sta	Office tionery	Plasti	ic	0.1		devel or s actua Sell reg	opment sold to al users. to the gister cycler	
		2	C	Office tionery	Plasti	ic	0.1		deve or s actua Sell reg	opment sold to al users. I to the gister cycler	
G	1	2 Solve	Sta	Office tionery	Plasti	emissions ef	0.1		devel or s actua Sell rec	opment sold to al users. to the gister cycler	
G G-	1	2 Solve Brief of rec	C Sta ent ma Note o covere	Office tionery nagement on types ed Solven	Plasti nt, VOC e of solven its etc.	ic emissions ef ts, Details o	0.1 c. f Solve	ent ree	deve or s actua Sell req rec	opment sold to al users. I to the gister cycler , % recov	ery, reuse
G G-	1	2 Solve Brief of rec Not Applic	ent ma Note o covere cable	Office tionery nagement on types d Solven	Plasti nt, VOC e of solven its etc.	ic emissions ef ts, Details c	0.1 c. f Solve	ent re	devel or s actua Sell req req	opment sold to al users. I to the gister cycler , % recov	ery, reuse
G G- G-	1 2	2 Solve Brief of rec Not Applic Brief	ent ma Note o covere cable	Office tionery nagemen on types d Solven	Plasti nt, VOC e of solven ts etc. proposed	emissions ef ts, Details o	0.1 c. f Solve	ent ree	devel or s actua Sell rec rec	iopment sold to al users. I to the gister cycler , % recov	ery, reuse
G G- G-	1 2 2	2 Solve Brief of rec Not Applic Brief Identify th	ent ma Note o covere cable Note o ne Ch	Office tionery anagement on types ad Solvent on LDAR emical s	Plasti nt, VOC e of solven its etc. proposed streams t	emissions ef ts, Details o d: that must b	0.1 c. f Solve	ent rec	devel or s actua Sell req rec covery	lopment sold to al users. I to the gister cycler , % recov	ery, reuse
G G- G-		2 Solve Brief of rec Not Applic Brief Identify th Types of Frequence	ent ma Note o covere cable Note o ne Ch comp	Office Inagement on types on LDAR emical so onents	Plasti nt, VOC e of solven its etc. proposed streams t (pumps,	emissions ef ts, Details c d: hat must b valves, co	0.1 c. f Solve	ent ree	devel or s actua Sell rec rec covery d.	be monit	ery, reuse
<u>G</u> G-		2 Solve Brief of rec Not Applic Brief Identify th Types of Frequenc Actions to	ent ma Note o covere cable Note o ne Ch comp cy of r o be t	Office anagement on types and Solvent on LDAR emical so onents of monitorinaken if a	Plasti nt, VOC e of solven its etc. proposed streams t (pumps, ng. i leak is o	ic emissions et ts, Details o d: hat must b valves, con detected.	0.1 c. f Solve e mor	ent ree nitore ors, e	devel or s actua Sell req rec covery d.	be monit	ery, reuse tored
<u>G</u> G-		2 Solve Brief of rec Not Applic Brief Identify th Types of Frequenc Actions to Length of	ent ma Note o covere cable Note o ne Ch comp cy of r o be t f time	Office Itionery Inagement on types ad Solvent on LDAR emical so onents of nonitorir aken if a in which	Plasti nt, VOC e of solven its etc. proposed streams t (pumps, ng. i leak is o n an atte	ic emissions ef ts, Details o d: that must b valves, con detected. mpt to repa	0.1 c. f Solve e mor nnecto	ent ree nitore ors, e	devel or s actua Sell req req covery d. tc.) to	be perfor	ery, reuse tored
G G-		2 Solve Brief of rec Not Applic Brief Identify th Types of Frequenc Actions to Length of	ent ma Note of covere cable Note of ne Ch comp cy of r o be t f time nat m	Office tionery anagement on types ad Solvent on LDAR emical so onents monitorir aken if a in which ust be ta	Plasti nt, VOC e of solven its etc. proposed streams t (pumps, ng. i leak is o n an atten aken if a	ic emissions ef ts, Details o d: hat must b valves, con detected. mpt to repa leak canno	0.1 c. f Solve e mor nnecto	ent ree nitore ors, e	devel or s actua Sell rec rec covery d. tc.) to must l	be perfor	tored rmed.
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	> Enclo	sures to chemical stora	na area collection	of emission from	loading of raw
	✓ LIUC moto	rials in particular solvent	s through boods (and ducts by indu	cod draft and cont
	by co	ndonsor to be onsured	s initugit noous a	and ducts by mou	ceu urait, anu com
				first nour the shi	
	In case	se the small spillage or le	eakage observed	, first pour the chi	na clay (vermicula
	on m	aterial and collect the co	ntaminated china	clay (vermiculate	e) and send to EIP
	If the	spillage is of inflammabl	e liquid, switch of	f all the power su	pply in the area to
	preve	ent Electric Spark.			
	> Two	condensers will install wi	th cooling water a	and chilled brine to	o recover the solve
	> Prima	ary Condenser HE-01: C	ooling Tower wat	er or Chilled wate	r at 5 °C will be us
	to co	ndense the solvents dep	end on the vapor	pressure at its op	perating conditions
	and t	he non condensed vapo	rs will be condens	sed in a Secondar	ry Condenser.
	> VOC	Trap Condenser HE-02:	Chilled Brine at -	·15 °C will be use	d to trap any trace
	of So	lvent which is slipped fro	m Secondary cor	ndenser.	
	> Emis	sion of VOCs can be trap	oped from breathi	ing and loading lo	sses from storage
	tanks	s, venting of process ves	sels, leak from pip	ping and equipme	ent by means of ho
	conn	ected with blower and se	nd to condenser	as shown in follow	wing diagram.
	Conc	lensed VOCs will be sen	d to spent solven	t recovery plant.	
Н		SAFETY details			
H-	1	Details regarding storage	of Hazardous ch	nemicals	
		(For tank storages only in	ncluding spent ac	id and spent solve	ent tanks)
	-				
	Sr no	Name of Chemical	Capacity of	Number of	Hazardous
	Crime .		Tank	Tanks	Characteristics
			rank	ranko	of Chemical
	1	Spont Acid	20 KI	2	or orientidat
	1	Spent Acid	20 KL	1 working 1	
				1 WOIKIIIG + 1	
	L I			Opuro	
<u>Br</u> Ba	ief note or ags etc.	n storage of Hazardous c	hemicals other th	an Tanks i.e. Dru	m, Barrels, Carboy
	> Solia	S malenais will be stored	I IN PP bags Liqui	a materials will be	e drums of 200 kg
\$	anu k stotv dotail	s of Hazardous Chomics			
30	Turne of	S OF Hazardous Chemicala	<u>lis.</u>	Sofoty monou	r00
<u> </u>	i ype of		Λ		
⊢			A	liona, Detall Giver	
<u> </u>		Aniline	_		
	Be	enzoyl chloride 1	_		
		HCI	_		
		Oleum			
	Appli	cability of PESO : Not Ap	plicable.		
H-	2	Types of hazardous Proc	esses involved a	nd its safety mea	sures:
		(Hydrogenation process,	Nitration process	s, Chlorination pro	cess, Exothermic
	(-	
		Reaction etc.)			
-		Reaction etc.)			
- T		Reaction etc.)	uding Automation)	
- T P	ype of	Reaction etc.)	uding Automatior)	
- T P	ype of Process	Reaction etc.) Safety measures incl	uding Automation) disc on reactor	
- P S	ype of Process Sulfonation	Reaction etc.) Safety measures incl > Provision of Safe > Provision of auto	uding Automatior ty valve & rapture	e disc on reactor.	
- P S	ype of Process Sulfonation	Reaction etc.) Safety measures incl > Provision of Safety > Provision of autoon > Required PPEs in	uding Automation ty valve & rapture dumping vessel.	e disc on reactor.	Hand gloves
- T P S	ype of Process Sulfonation	Reaction etc.) Safety measures incl > Provision of Safe > Provision of auto > Required PPEs lingumboot Queboot	uding Automatior ty valve & rapture dumping vessel. ke full body prote	e disc on reactor. ction PVC apron,	Hand gloves,
- P S	ype of Process Sulfonation	Reaction etc.) Safety measures incl > Provision of Safe > Provision of auto > Required PPEs ligumboot, Respired	uding Automation ty valve & rapture dumping vessel. ke full body prote atory mask etc. w	e disc on reactor. ction PVC apron, ill be provided to c	Hand gloves,

		-
	 to avoid runaway reaction, TC charging will be done gradually & slowly. Charging will be done only through closed line and system. Scrubber 	
	attached with closed system.	
	Make sure the absorber unit (two stage Alkali scrubber) is working and	
	capable of handling vented SO2 fumes.	
	Neutralizing agent will be kept ready for tackle any emergency spillage.	
	Safety Shower and eye wash will be provided near process area	
	Emergency siren and wind sock will be provided.	
	Tele Communication system and mobile phone will be used in case of	
	emergency situations for communication.	
	Caution note and emergency first aid will be displayed and train for the	
	same to all employees.	
	First Aid Boxes will be available in process area.	
	Emergency organization and team will be prepared as per On site-Off	
	site emergency planning.	
	Emergency team will be prepared and trained for scenario base	
	emergency. Like Toxic control team, Fire control team, First aid team,	
	communication and general administration team, Medical team etc.	
	Do not touch damaged containers or spilled material unless wearing	
	appropriate protective clothing.	
	Use water spray to reduce vapors; do not put water directly on leak,	
	spill area or inside container. Keep combustibles (wood, paper, oil, etc.)	
	away from spilled material.	
	Cover with DRY earth, DRY sand or other non-combustible material	
	followed with plastic sheet to minimize spreading or contact with rain.	
Nitration	Nitration will be done in closed S.S vessels.	
	Nitric acid will be used for nitration process. Nitric acid is an	
	extremely corrosive acid capable of causing severe chemical burns very	
	rapidly. Because of the nazards posed by nitric acid, it is important to take	
	safety measures whenever handling it.	
	In our mitation process, exothermic reaction will be controlled by adapted design of reaction chamicals in a fixed time (not chart duration).	
	by a second seco	
	Thus any operate country water circulation in jacket of reaction will be controlled	
	by external cooling circulation and therefore vessels will not be pressurized	
	The nitration reaction will be controlled by systematic cooling design	
	to withdraw the energy evolved	
	Adequate pressure relief valve will be provided for each vessels	
	having pressure release capacity will be kept below -3 kg/cm2 than that of	
	reaction vessels.	
Hydrogenati	FLP type area will be provided.	
on	 Total enclosed process system. 	
-	Nitrogen blanketing in Hydrogenation reactor.	
	Safety valve and Rupture disc provided on reactor.	
	> Cooling Chilling and power alternative arrangement have been	
	made on reactor.	
	> PRV station with shut off valve, safety valve provision will be made	
	for hydrogenation reaction safety.	
	Before Hydrogen Gas charging in to reactor and after completion of	
	reaction Nitrogen flushing will be done.	
	Flame arrestor will be provided on vent line of reactor and it will be	
	extended up to roof level.	
	Open well ventilated and fragile roofs will be provided to on reactor.	
	Safe Catalyst charging method will be adopted.	
	SOP will be prepared and operators will be trained for the same.	
	Static earthling and electric earthling (Double) provided.	

	chemical will be provided.	on pipeline hanges of hamr
H-3	Details of Fire Load Calculation	
-	Total Plot Area:	5000
	Area utilized for plant activity:	1150
		1150
	Area utilized for Hazardous Chemicals Storage:	560
	Number of Floors:	G + 1
	Water requirement for firefighting in KLD :	10260
	Water storage tank provided for firefighting in K	LD: 100,000
	Details of Hydrant Pumps:	3.0 HP
	Nearest Fire Station :	Bharuch Fire Station (19.39 km)
	Applicability of Off Site Emergency Plan:	Yes
- H-4	Details of Fire NOC/Certificate:	
H-5	Details of Occupational Health Centre (OH	C):
-	Number of permanent Employee :	40
	Number of Contractual person/Labour :	-
	Area provided for OHC:	35
	Number of First Aid Boxes :	5
	Nearest General Hospital :	General Hospital, Bharuch (19.37 km)
	Name of Antidotes to be store in plant :	General

 During meeting, Committee noted that PP presented revised layout plan, revised water balance diagram, revised flue gas emission matrix, details of auto control system for critical process and notarised undertaking for membership of TSDF and CHWIF site. PP presented details of PPE for safety purpose, Risk assessment of hazardous chemicals considering the worst case scenario is carried out and revised EMP.

- Looking to reply presented by PP showing undertaking for obtain membership of common facility as and when production will start, Committee insisted for provisional membership of common facility and technical expert of PP, later on submitted provisional membership of TSDF and CHWIF membership certificate through e-mail.
- Committee found reply submitted by PP was satisfactory.
- After detailed discussion, Committee unanimously decided to recommend the project to SEIAA,

Gujarat for grant of Environment Clearance with the following specific condition: SPECIFIC CONDITIONS:

- Project proponent (PP) shall install CEMS [Continuous Emission Monitoring System] in line to CPCB directions to all SPCB vide letter no. B-29016/04/06PCI-1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis. [For Small/Large/Medium (Red Category) & Whichever (Air emission & Effluent discharge) is applicable].
- 2. PP shall not manufacture more than five dyes products and three dyes intermediate products from product list, at a time as per details submitted by PP.
- 3. Close loop solvent recovery system with adequate condenser system shall be provided to recover solvent vapours in such a manner that recovery shall be maximum and recovered solvent shall be reused in the process within premises.
- 4. PP shall strictly complying each and every conditions which ever is applicable, as mentioned in GPCB circular dated 03/11/2018 for production of dirty dyes intermediate products.
- 5. Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines. LDAR Logbooks shall be maintained.
- The National Ambient Air Quality Emission Standards issued by the Ministry vide G. S. R. No. 826 (E) dated 16th November, 2009 shall be complied with.
- National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G. S. R. 608 (E) dated 21/07/2010 and amended from time to time shall be followed.
- 8. Unit shall have to adhere to the prevailing area specific policies of GPCB with respect to the discharge of pollutants, and shall carry out the project development in accordance & consistence with the same.
- 9. The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority.
- 10. All measures shall be taken to avoid soil and ground water contamination within premises.
- 11. PP shall maintain complete ZLD all the time and there shall be no drainage connection within premises and no waste water discharge outside premises by any means.
- 12. PP shall not use lignite as fuel for boiler, TFH, HAG etc as per details submitted by PP.

<u>WATER</u>

- 16. Total water requirement for the project shall not exceed 457.50 KLD. Unit shall reuse 262 KLD of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 195.50 KLD and it shall be met through GIDC supply only. Prior permission from concerned authority shall be obtained for withdrawal of water.
- 17. The industrial effluent generation from the project shall not exceed 439 KLD.
- 18. Industrial effluent shall be segregated into two streams (1) High COD and TDS effluent (2) Low COD and TDS effluent and it shall be managed as below.

High COD and TDS effluent (254 KLD)

254 KLD, High COD and TDS effluent from process shall be treated in ETP-1 consists of Primary treatment units. Then treated effluent shall be evaporated in in-house MEE and 280 KLD, MEE condensate shall be reused within premises.

• Low COD and TDS effluent (164 + 21 KLD):

- 164 KLD, Low COD effluent from process shall be treated in ETP-2 followed by RO plant and 114 KLD, RO permeate shall be reused back in process while 50 KLD, RO reject shall be evaporated in in-house MEE.
- > 21 KLD, Low COD effluent from washing and utility shall be treated in ETP-3 followed by RO plant and 18.50 KLD, RO permeate shall be reused back in process while 2 KLD, RO reject shall be evaporated in in-house MEE.
- 19. Unit shall feed wastewater to in-house MEE only after ensuring content of effluent for COD/VOC so as not to get air borne during evaporation in order to achieve no adverse impacts on Environment and Human Health.
- 20. Domestic wastewater generation shall not exceed 2 KL/day for proposed project and it shall be treated in STP. It shall not be disposed off through soak pit/ septic tank. Treated sewage shall be utilized for gardening and plantation purpose within premises after achieving on-land discharge norms prescribed by the GPCB.
- 21. During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, it shall be disposed in GIDC drainage.
- 22. Unit shall provide buffer water storage tank of adequate capacity for storage of treated effluent during any emergency or shutdown of in-house MEE.

<u> AIR</u>

- 23. Unit shall not exceed fuel consumption and provide APCM and Stack height as mentioned in flue gas matrix.
- 24. Unit shall provide APCM and stack height as mentioned in process gas matrix.
- 25. PP shall use approved fuels only as fuel in boilers.

HAZARDOUS & SOLID WASTE

- 1. All hazardous solid waste shall be managed as mentioned in hazardous waste matrix.
- 2. The unit shall submit the list of authorized end users of hazardous wastes along with MoU signed with them at least two months in advance prior to the commencement of production. In the absence of potential buyers of these items, the unit shall restrict the production of the respective items.

GREENBELT AREA

3. The PP shall develop green belt within premises (1670 Sq m i.e. 33 % of the total plot area) as per the undertaking submitted before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.

13. Safety & Health:

- a) PP shall obtain PESO permission for the storage and handling of hazardous chemicals.
- b) PP shall provide Occupational Health Centre (OHC) as per the provisions under the Gujarat Factories Rule 68-U.
- c) PP shall obtain fire safety certificate / Fire No-Objection certificate (NOC) from the concern authority as per the prevailing Rules / Gujarat Fire Prevention and Life Safety Measures Act, 2016.
- d) Unit shall adopt functional operations/process automation system including emergency response to eliminate risk associated with the hazardous processes.
- e) PP shall carry out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in the manufacturing area in case of any emergency or accident.
- f) PP shall install adequate fire hydrant system with foam trolley attachment within premises and separate storage of water for the same shall be ensured by PP.
- g) PP shall take all the necessary steps for control of storage hazards within premises ensuring incompatibility of storage raw material and ensure the storage keeping safe distance as per the prevailing guidelines of the concerned authority.
- h) PP shall take all the necessary steps for human safety within premises to ensure that no any harm is caused to any worker/employee or labor within premises.
- i) Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.
- j) Unit shall provide water sprinkler to the ammonia storage cylinder.
- k) Unit shall never store drum/barrels/carboys of incompatible material/chemical together.
- Unit shall provide safety valve and rapture disc, as well as auto dump or auto quench/, suppress system for nitration vessel safety.
- m) Unit shall provide a spare tank with emergency transfer system and bund/ dyke wall to Oleum storage tank

7.	SIA/GJ/IND2/200631/2021	M/s. New Pack Chemical Industries	EC-Reconsideration
		Plot No: 4919, Sarigam Industrial Estate, Plastic Zone, Ta: Umbergaon, Dist: Valsad-	

Category of the unit: 5(f)
Project status: New

- Project proponent (PP) submitted online application vide no. SIA/GJ/IND2/200631/2021on dated 24.03.2021for obtaining Environmental Clearance.
- Project proponent has submitted Form 1, Pre-Feasibility Report & Environment Management Plan as per Notification issued by MoEF&CC vide S.O. 1223(E) dated 27th March, 2020 regarding consideration of proposals or activities in respect of Active Pharmaceuticals Ingredients (API) as B2 category.
- This is a new project proposed for manufacturing of synthetic organic chemicals [API & API Intermediates] as tabulated below.

Sr No	Name of Product	API / Intermediate	CAS NO	Quantity MT/Month	End Use of Product
Grou p - 1	Synthetic Drugs Active P	harmaceutical li	ngredient (API)	I	
1	Hydroxy Chloroquine	API	118-42-3		Anti- Viral Drugs / Anti Covid-19
2	Hydroxy Chloroquine Sulphate	API	747-36-4		Anti- Viral Drugs / Anti Covid-19
3	Hydroxy Chloroquine Phosphate	API	50-63-5		Anti- Viral Drugs / Anti Covid-19
4	Hydroxy Novaldamine	API	69559-11-1		Anti- Viral Drugs / Anti Covid-19
5	Azithromycin	API	83905-01-5		Anti- Viral Drugs / Anti Covid-19
6	Lumefentrine	API	4803-27-4	•	Anti-Malarial Drug
7	Finofebrate	API	82186-77-4	100	Anti-Inflammatory / Cholesterol
8	Chlorhexidine Base	API	55-56-1		Anti-Microbial (Disinfectant & Antiseptic)
9	Nimesulide	API	51803-78-2		Anti Inflammatory
10	Diclofenac Sodium	API	15307-79-6	•	Anti-Inflammatory / Arthritis pain
11	Tinidazole	API	19387-91-8	-	Antibiotic/ Anti warms
12	Mebendazole	API	31431-39-7		Anthelmintic or Anti Worm
13	PCMX	API	88-04-0		Anti-Microbial
14	Valproic Acid / 2-Propyl	API	99-66-1		Anticonvulsant drug

	Pentanoic Acid				
15	Sodium Valproate/ Sodium 2-Propyl Pentanoate	API	1069-66-5	-	Anticonvulsant drug
16	Diethyl Divalproex Sodium	API	76584-7-8	-	Anti-Epileptic Drug
17	NPBR / N- Propyl Bromide	API	106-94-5		Antiseptics
18	Ferrous Fumarate	API	141-01-5	-	Used for Anemia
19	Ferrous Gluconate	API	299-29-6	-	Used for Anemia
20	Ferrous Ascorbate	API	24808-52-4		Used for Anemia
21	Zinc Gluconate	API	04-02-4466		Antibiotic Drug
22	Calcium Gluconate	API	299-28-5		Hypoparathyroidism, Osteoporosis
23	Calcium Propionate	API	4075-81-4		Antifungal Drugs
24	Sodium Propionate	API	137-40-6		Antifungal Drugs
25	Di Calcium Phosphate Di Hydrate	API	7789-77-7		Anti-Convulsant Drug
26	Di Calcium Phosphate Anhydrous	API	7757-93-9		Anti-Convulsant Drug
27	Tri Calcium Phosphate	API	7758-87-4		Anticaking Agent
28	2-Ethoxy Benzamide	API	938-73-8		Anti- Inflammatory Drugs
Grou p- 2	Pharmaceutical Interme	diates			
29	2,7 Di Chloro -9- H Fluorene	Pharmaceutica I Intermediate	7012-16-0	50	Pharmaceutical Intermediate for Lumefentrine, Fluorenone
30	4,7 Di Chloro Quinoline	Pharmaceutica I Intermediate	86-98-6		Pharmaceutical Intermediate for Hydroxy Chloroquine Sulfate

31	N-(2- Phenoxy Phenyl) Methane Sulfonamide	Pharmaceutica I Intermediate	51765-51-6		Pharmaceutical Intermediate for Nimesulide
32	Para Amino Phenol	Pharmaceutica I Intermediate	123-30-8		Pharmaceutical Intermediate for Paracetamol
33	2 - Methyl 5-Nitro Imidazole	Pharmaceutica I Intermediate	443-48-1		Pharmaceutical Intermediate for Metronidazole
34	4,6 Di Chloro 5- Methoxy Pyrimidine	Pharmaceutica I Intermediate	5018-38-2		Pharmaceutical Intermediate for 2-(4- Acetamidophenylaminocarbonyl) -3- amino-thiophene
35	Meta Amino Acetanilide	Pharmaceutica I Intermediate	102-28-3		Pharmaceutical Intermediate for Diazatricyclodecane
36	4 -Bromo-2 Fluoro Acetanilide	Pharmaceutica I Intermediate	1009-22-9		Pharmaceutical Intermediate for Flurbiprofen
37	2,4,6 Trimethyl Benzoyl Chloride	Pharmaceutica I Intermediate	938-18-1		Pharmaceutical Intermediate for Benzyl Pyrimidine
38	1 Amino 4 Methyl Piperazine	Pharmaceutica I Intermediate	6928-85-4		Pharmaceutical Intermediate for Rifampicin
39	5,6-Dimethoxy-1- Indanone	Pharmaceutica I Intermediate	83-33-0		Pharmaceutical Intermediate for 2,3-dimethoxy-11H-indeno[1,2- b]quinoline-6,10-dicarboxylic acid
40	6-Methoxy-8- Nitroquinoline	Pharmaceutica I Intermediate	85-81-4		Pharmaceutical Intermediate for Primaquine Phosphate
Grou p- 3	Research & Developmer	nt Based Product	ts		
41	Research & Development Based Products			0.1	
	TOATL			150.1	

Brief Note of Product Profile:

1. No of Manufacturing Plants: 2 Nos.

2. Brief Note regarding number of Products to be manufactured considering plant capacity :

ENDUSE OF PRODUCTS

			In Cas	e of Interme	diate Stage	of API	
Sr. No	Name of Products/APIs/ Intermediates	CAS NO	Type/ Category of Product (API/ Intermedi ate)	Stage of Intermediat e n-1, n-2, etc	Name of API in which Intermedi ate Used/ End use of said Intermedi ate	CAS No. (API)	Said API is used for/End Use of said API
Grou p - 1	Synthetic Drugs A	ctive Phar	maceutica	I Ingredient	(API)	I	
1	Hydroxy Chloroquine	118-42-3	API	_	_	_	Anti- Viral Drugs / Anti Covid-19
2	Hydroxy Chloroquine Sulphate	747-36-4	API	_	_	_	Anti- Viral Drugs / Anti Covid-19
3	Hydroxy Chloroquine Phosphate	50-63-5	API	_	_	_	Anti- Viral Drugs / Anti Covid-19
4	Hydroxy Novaldamine	69559- 11-1	API	_	_	_	Anti- Viral Drugs / Anti Covid-19
5	Azithromycin	83905- 01-5	API	_	_	_	Anti- Viral Drugs / Anti Covid-19
6	Lumefentrine	4803-27- 4	API	_	-	_	Anti-Malarial Drug
7	Fenofibrate	82186- 77-4	API	_	_	_	Anti-Inflammatory / Cholesterol
8	Chlorhexidine Base	55-56-1	API	_	_	_	Anti-Microbial (Disinfectant & Antiseptic)
9	Nimesulide	51803- 78-2	API	_	_	_	Anti Inflammatory
10	Diclofenac Sodium	15307- 79-6	API	_	_	_	Anti-Inflammatory / Arthritis pain
11	Tinidazole	19387- 91-8	API	_	_	_	Antibiotic/ Anti warms
12	Mebendazole	31431- 39-7	API	_	_	_	Anthelmintic or Anti Worm
13	PCMX	88-04-0	API	_	_		Anti-Microbial
	Valproic Acid/2-	00 66 1					Anticonvulsant
14	Propyl Pentanoic Acid	99-00-1		_	—	_	

	Valproate/	5					
	Sodium 2-Propyl						
	Pentanoate						
40	Diethyl	76584-7-					
16	Divalproex	8	API	—	—	—	Anti-Epileptic
	Sodium						
17	NPBR / N- Propyl	106-94-5	API				Antiseptics
	Bromide			_	_	_	
18	Ferrous	141-01-5	ΔΡΙ				Used for Anemia
10	Fumarate		/ /	_	-	_	
19	Ferrous	299-29-6	ΔΡΙ				I Ised for Anemia
13	Gluconate	200-20-0		—	—	—	
20	Ferrous	24808-					Lised for Anemia
20	Ascorbate	52-4		_	—	—	
21	Zina Cluconata	04-02-					Antibiotic Drug
۲ ک		4466		—	-	_	
00	Calcium	200 20 5	ים א				Hypoparathyroidism,
22	Gluconate	299-28-5	API	-	-	_	Osteoporosis
00	Calcium	4075-81-					
23	Propionate	4	API	_	-	-	Antifungal Drugs
	Sodium						
24	Propionate	137-40-6	API	-	—	-	Antifungal Drugs
	Di Calcium						
25	Phosphate Di	7789-77-	API				Anti-Convulsant Drug
	Hydrate	7		_		_	Anti-Convulsant Drug
	Di Calcium						
26	Phosphate	7757-93-	ΔΡΙ				Anti-Convulsant Drug
20	Anhydrous	9	7.1 1	—	-	_	
	Tri Calcium	7758-87-					
27	Phosphate	1100 01	API	_	_	_	Anticaking Agent
28	Bonzamida	938-73-8	API	_	_	_	Anti Inflammatory
<u></u>	Denzamue						
GIOU	Pharmaceutical In	termediate	es				
p- 2			Dharmaa		Lumofontr	00106	
	27 Di Chloro 0	7010 16	Pharmac	n-1	Lumerenu	02100- 77 /	Anti-Malarial Drug
29	2,7 DI Chioro -9-	7012-16-				11-4	
	H Fluorene	0	Intermedi	n-3	Fluorenon	486-25-9	Anti-Malarial Drug
			ate		e		
			Pharmac		Cnioroqui		
30	4,7 DI Chloro	86-98-6	eutical	n-1	ne	54-05-7	Anti-Malarial
	Quinoline		Intermedi		Phosphat		
			ate		е		
	N-(2- Phenoxy		Pharmac				
31	Phenyl) Methane	51765-	eutical	n-3	Nimesulid	51803-	Anti-Inflammatory
	Sulfonamide	51-6	Intermedi	n-3	е	78-2	
			ate				
32	Para Amino	123-30-8	Pharmac	n-1	Paraceta	103-90-2	Anti-Malarial
52	Phenol	120-00-0	eutical	11-1	mol	100-30-2	

			Intermedi				
33	2 - Methyl 5-Nitro Imidazole	443-48-1	Pharmac eutical Intermedi ate	n-1	Metronida zole	443-48-1	Antibiotic and Antiprotozoal Drug
34	4,6 Di Chloro 5- Methoxy Pyrimidine	5018-38- 2	Pharmac eutical Intermedi ate	n-4	2-(4- Acetamid ophenyla minocarb onyl)-3- amino- thiophene		Anti-Cancer Drug
35	Meta Amino Acetanilide	102-28-3	Pharmac eutical Intermedi ate	n-3	Diazatricy clodecane	280-57-9	GPR119 Receptor/ Anti-Inflammatory
36	4 -Bromo-2 Fluoro Acetanilide	1009-22- 9	Pharmac eutical Intermedi ate	n-2	Flurbiprof en	5104-49- 4	Anti-Inflammatory
37	2,4,6 Trimethyl Benzoyl Chloride	938-18-1	Pharmac eutical Intermedi ate	n-2	Benzyl Pyrimidin e	289-95-2	Benzyl Pyrimidine
38	1 Amino 4 Methyl Piperazine	6928-85- 4	Pharmac eutical Intermedi ate	n-2	Rifampici n	13292- 46-1	Anti-tuberculosis
39	5,6-Dimethoxy-1- Indanone	83-33-0	Pharmac eutical Intermedi ate	n-1	Donepezil Hydrochlo ride	120011- 70-3	Alzheimer's Disease
40	6-Methoxy-8- Nitroquinoline	85-81-4	Pharmac eutical Intermedi ate	n-2	Primaquin e Phosphat e	63-45-6	Anti Malarial Drug
Grou p- 3	Research & Devel	opment B	ased Prod	ucts			
41	Research & Development Based Products						

- The project falls under Category B2 of project activity 5(f) as per the schedule of EIA Notification 2006 and amendment dated 27th March, 2020.
- PP submitted an undertaking ensuring proposed product profile is in line with MoEF&CC's Notification vide
 S.O. 1223 (E) dated 27/03/2020 in respect of Active Pharmaceutical Ingredients (API) as category B2

projects. Undertaking as proposal of said product are eligible to consider under B2 category as per the notification of MoEF&CC dated 27.03.2020

- The proposal was considered in the SEAC video conference meeting dated 18.06.2021.
- Salient features of the project including Water, Air and Hazardous waste management are submitted.
- During the meeting dated 18.06.2021, the project was appraised based on the information furnished in Form
 - 1, Pre-Feasibility Report, Environment Management Plan and details submitted by e-mail.
- Project proponent (PP) and their Technical Expert from M/s Revu Consultancy LLP remain present during video conference meeting.
- This is a Greenfield project proposed for manufacturing of synthetic organic chemicals [API& API
 Intermediate] at GIDC Sarigam. Total plot area is 1864 Sq. m.
- Committee deliberated on Product profile, Layout plan, Storage details, Process safety, Fire safety, water balance & waste water management, Flue gas and process gas emission & Air Pollution Control System, Hazardous waste matrix, EMP, CER, Green belt, etc.
- Committee insisted to provide (1) SOP for handling & storage of bromine with its safety measures and (2) Membership of nearby TSDF & CHWIF mentioning capacities as per GPCB circular dated: 08.01.2020 instead of sending the hazardous waste to TSDF & CHWIF of Kutch region.
- After detailed discussion, Committee unanimously decided to consider the proposal in one of the upcoming SEAC meeting only after satisfactory submission of following details:
 - 1. SOP for handling & storage of bromine with its safety measures.
 - 2. Membership of nearby TSDF & CHWIF mentioning capacities as per GPCB circular dated: 08.01.2020 instead of sending the hazardous waste to TSDF & CHWIF of Kutch region.
- PP submitted the reply of the said points of meeting dated 18.06.2021 along with other supporting documents.
- This proposal is reconsidered in SEAC meeting dated 05.08.2021. PP along with their technical expert/consultant from M/s Revu Consultancy LLP remains present in the meeting and made presentation before committee.
- PP submitted revised salient features of water, air and Hazardous waste management are as under,

Sr. no.		Particulars			Details					
A-1	Total cost of Pro	al cost of Proposed Project (Rs. in Crores):								
		Total Project 8.8 Crore								
	Break-up of pro	Break-up of proposed project Cost:								
		Details	Project Cost,,(Rs. In (Crores)						
		Land & Building	3.0							
		Plant and Machineries	2.0							
		Other Miscellaneous	1.0							
		EMP	2.8							
		Total	8.8							
A-2	Details of Enviro	onmental Management Plan	(EMP)	As below:						

-									
						Recu	irring co	ost	
Sr.	Unit	Details	Capital Cost (INR in	Ope (erating Cost	Mainten	ance	Total Recurring	
			crore)	(croi	re/Annu m)	Cos (crore/Ar	nnum)	Cost (crore/Annum	
1	Air Pollution Control	Cost of APCM, stack	Cost of APCM, 0.45 0.100 0.030 stack		0.130				
2	Water Pollution Control	Membership cost of CETP, ETP, MEE	of 1.05	1	.130	0.03	0	1.160	
4	Solid and Hazardous Waste Management	Membership cost of TSDF, CHWIF etc	of 0.065	0	.184	0.00	3	0.135	
5		Cost of PPE, Fire fighting equipmen Fire hydrant syster SCADA based	, n, 0.89	0	.147	0.00	4	0.099	
6	AWH Monitoring	pH, COD apparatu BOD Incubator, RDS, TDS meter, Flow Meter	s, 0.04	0	.098	0.00	4	0.101	
7		OHC, Medical Examination, Insurance of employees	OHC, Medical Examination, 0.1 0.010 C Insurance of		0.00	5	0.015		
8	Green belt development	Plantation	0.02	0	.013	0.00	5	0.017	
9	CER	-	0.18	0	.000	0.00	0	0.000	
	Total		2.8	1	1.68	0.07	9	1.65	
- Summ	nary								
	Cost of Project in (Crores per Annum:	8.8						
	EMP Capital Cost	in Crores per Annu	m and Percent	age:		2.8 (31.	8%)		
	EMP Recurring Co	ost in Crores per An	num and			1.68 (1	9%)		
A-3	Details of CER as	per OM dated 01/0)5/2018 (In case	of proje	ect falls und	ler CPA/SPA	CFR fun	d allocation to be at leas	
_	1.5 times the slabs give	n in the OM dated 01.05.	2018 for SPA and	2 times	s for CPA i	n case of Fr	vironmen	tal Clearance as per the	
	mechanism published vid	e MoEF & CC's OM vide 3	1.10.2019.)						
	9	6 as per the OM	Rs. in Crores		7				
	2	.0 %	0.18 Crores						
Brief n	note on proposed activ	ities:							
Sr.					Cost	t in Rs. (La	ıkhs)	The October	
No.	ACTIV	ity	viiage		Amount	Year-1	Year-2		
1.	Donation of equipment Center • Two way adjustat Rs. 25,000 each • Fogging Machine	s in Primary Health ble bed (4 Nos.) - (3 Nos.) – Rs	Sarigam/Manda		2.2	1.1	1.1	2 Years	
	30,000 each								

2.	Company will construc provide drinking water to remove TDS in Sarigam and Bhilad	at a place which will having RO system Drinking Water at	Sarigam and Bhilad	7	3.5	3.5		
	20 KLD (2 NOS.) - KS. 3	5,50,000 each						
3.	Plantation activity with saplings)	n tree guard (300	Bhilad	1.5	1.0	0.5		
4.	Solar street light installation (25 Nos.) - Rs. 10,000 each		Sarigam/Manda	2.5	2.0	0.5		
5	Contribution in prov harvesting system - structures (Rs. 60,000	riding Rain water - 8 Nos. of RWH each)	Sarigam/Bhilad	4.8	3.0	1.8		
	TOTAL			Rs. 18 Lakh				
В	Land / Plot ownership details:							
B-1	Plot area							
	Total Plot area							
	1864 Sq. m.							
B-2	Brief note on Area	adequacy in line to	proposed project a	ctivities:				
	> Total Area of pre	emises is 1864 Sa.	m. land, which is ad	equate for	the pro	posed pro	oduction. Entire	•
	process area wil	ll cover 318 Sam a	of land. Other land re	auiremen	t is for o	ffice utili	tv area storade	د
	of raw materials	solvent and finish	products I and requ	uirement f	or the pr	niect incl	uding its break	
			hin DEP I avout play					
	provided in PFR		a in FTR. Layout pla	IT Clearly C	lemaica	ang an ac		
B-3	Green belt area							
_			Total (So mete	r)				
		Area in Sq. meter	615					
		% of total area	33 %					
С	Employment gener	ration						
			Total					
			40					
D	WATER							
D-1	Source of Water S	upply						
	(GIDC, Bore well, Surface	e water, Tanker supply etc	S)					
	GIDC Water	r Supply						
	Status of permission	on from the concer	n authority.					
	➢ Will be app	lied for required pe	ermission					
D-2	Water consumption	n (KLD)						

	Categor	y	Quantity KLD		Remarks
	(A) Domestic		2.5		
	(B) Gardening		2.5		
	(C) Industrial				
	Process		22.0		
	Washing (Floor/ Ve	essel)	1.0		
	Boiler		10.0		
	Cooling		10.0		
	Others (Scrubbing)	2.0		
	Industrial Total		45.0		
	Grand Total (A + E	3 + C)	50.0		
(API Intermediates).	· · · · · · · · · · · ·	Quantity		
(API Intermediates). Summary of wate	r requirement	Quantity (KLD)		Remarks
(To	API Intermediates). Summary of wate	r requirement for the project (A)	Quantity (KLD) 50.0		Remarks
(To Qu	API Intermediates). Summary of wate otal water requirement uantity to be recycled (for the project (A)	Quantity (KLD) 50.0 2.0		Remarks Forwarded to STP reused for Gardening purpose.
(Tc Qt Tc	API Intermediates). Summary of wate otal water requirement uantity to be recycled (otal fresh water require	for the project (A) B) ment (C)	Quantity (KLD) 50.0 2.0 48.0		Remarks Forwarded to STP reused for Gardening purpose.
(To Qu To Er i.e	API Intermediates). Summary of wate otal water requirement uantity to be recycled (otal fresh water require nsure Total water require c. A = B + C	r requirement for the project (A) B) ment (C) irement = Fresh w 50 KLD = 48 KLI	Quantity (KLD) 50.0 2.0 48.0 ater + Recycled water 0 + 2 KLD		Remarks Forwarded to STP reused for Gardening purpose.
(Tc Qı Er i.e Rı [S	API Intermediates). Summary of water otal water requirement uantity to be recycled (otal fresh water require hsure Total water require as A = B + C euse/Recycle details ource of reuse & ap	r requirement for the project (A) B) ment (C) irement = Fresh w 50 KLD = 48 KLI 5 (KLD) with feas plication area]	Quantity (KLD) 50.0 2.0 48.0 ater + Recycled water 0 + 2 KLD ibility.		Remarks Forwarded to STP reused for Gardening purpose.
(To Qu To Er i.e	API Intermediates). Summary of water otal water requirement uantity to be recycled (otal fresh water require nsure Total water require as A = B + C euse/Recycle details source of reuse & app Source of waster water for reuse in KLD (From where it is coming)	r requirement for the project (A) B) ment (C) rement = Fresh w 50 KLD = 48 KLI (KLD) with feas plication area] Application ar with quantity KLD (Where it is u	Quantity (KLD) 50.0 2.0 48.0 ater + Recycled water 0 + 2 KLD ibility. ea in ised) Characteristic waste water t reused (COD, TDS etc.)	cs of to be BOD,	Remarks Forwarded to STP reused for Gardening purpose. Remarks regarding feasibility reuse

	Category	Quantity KLD	Remarks]
	(A) Domestic	2.0	Forwarded to STP reused for Gardening purposes	
	(B) Gardening]
	Process	24.0	Treated in ETP-1 (Primary) followed by In- House MEE.]
	Boiler	2.0		
	Cooling	2.0	Forwarded to ETP	
	Washing	1.0	Forwarded to ETP	
	Scrubbing	2.5	Sold out as By Product	
	Total Industrial	31.5		
	Grand Total (A+B+C)	33.5		
Brief Note	e on worst case scenario fo	r waste water gene	ration (Qualitative and Quantitative):	
➢At Wors Chlorod 2 (API I Brief just	st case scenario, maximum quine Sulphate) in Group -1 Intermediates).	Wastewater genera (API Products) + P	ation will be used in Product No. 2 (Hydroxy roduct No. 40 (6-Methoxy 8-Nitro Quinoline) in G	Froup -
concentra	ation effluent generation fro ot applicable in our case	m proposed project	(Whichever is applicable).	o nign
D4 M	ode of Disposal & Final me	eting point		
-				
Domest :	tic • 2.0 KLD domestic wa for Gardening	ste water will be tre	ated in STP & treated waste water shall be reus	ed
Industri : Clearly m D-5 Tr For Domo Capacity For Indus	 al 2.5 KLD Waste wa Products from respe- users under Rule-9. Concentrated Waste having Primary Tre- system). 22.0 KLD Condensa System) whereby 5. and Washing etc. is 27.0 KLD Total Wa Cooling Tower & W treatment system. 27.0 KLD Final Treat to Sarigam C-ETP discharge system lenention about final disposal eatment facilities estic waste water: of STP : 10KLD 	ater from Scrubbing ective gases such a ewater Stream-1: 2 eatment. Treated w ate from MEE will be 0 KLD Dilute Efflue mixed up at ETP -2 astewater stream (2 ashing) will be treated (Sarigam Clean Ini ads to Deep Sea at	g System which is mainly Hazardous Waste / s HCl, HBr, and SO2 etc. will be sold to actual 24.0 KLD Process Effluent will be treated in E vater will be sent to MEE (Multi Effect Evapore e forwarded to ETP-2 (Primary, Secondary & Te nt stream mainly coming from Boiler, Cooling To for further treatment. 22.0 KLD MEE Condensate + 5.0 KLD from B ed in ETP-2 having Primary, Secondary and Te total confirming the C-ETP Norms will be dispositiative) for further treatment and disposal to M West Cost of Arabian Sea.	By End TP-1 orator rtiary ower, coiler, rtiary ed of arine
[In-house ET	P (Primary, Secondary, Tertiary), ME	E, Stripper, Spray Dryer, S	TP etc.	
	255 th	meeting of SEAC-Guiar	at Dated 05 08 2021	

Treatment scheme including segregation at source. (Give Characteristics of each stream i.e. COD, BOD, TDS etc.) In case of stream segregation, Separate ETP (ETP-1, ETP-2....) for each stream shall be proposed.

- > Adequate In-house ETP (Primary, Secondary & Tertiary), MEE will be provided
- Capacity of ETP 50 KLD
- > MEE $1.0 \text{ m}^3/\text{hr}$

Treatment Scheme :-

Process effluent shall be collected in Collection cum Neutralization Tank-1(CNT-01) where Alkali dosing shall be done from Alkali Dosing Tank (ALDT-01) to maintain pH of the effluent. The mixer is provided to keep solids in suspension. Then after, neutral wastewater shall be pumped to Flash Mixer-01 (FM-01) where Alum and Polyelectrolyte shall be dosed from Alum Dosing Tank (ADT-01) and Polyelectrolyte Dosing Tank (PEDT-01) respectively by gravity. Then after, coagulated wastewater shall be settled in Primary Lamella (PST-01). Clear supernatant from PST-01 shall be collected in Storage Tank (ST-01).

Treated water will be sent to MEE (Multi Effect Evaporator system) & Condensate from MEE will be forwarded to ETP-2 (Primary, Secondary & Tertiary System) whereby Dilute Effluent stream mainly coming from Boiler, Cooling Tower, and Washing etc. is mixed up at ETP -2 for further treatment.

Total Wastewater stream (MEE Condensate + Boiler, Cooling Tower & Washing) will be transferred in Secondary Lamella and Aeration Treatment and finally transferred in Sand Filter (PSF-01) to remove left out TSS and Activated Carbon Filter (ACF-01) for final effluent polishing. After this **r**eatment, effluent shall be collected inTreated wastewater Tank (TET-01).

Finally 27.0 KLD Treated Wastewater as total confirming the C-ETP Norms will be disposed of to Sarigam C-ETP (Sarigam Clean Initiative) for further treatment and disposal to Marine discharge system leads to Deep Sea at West Cost of Arabian Sea.

Sludge settled in PST-01 and excess sludge (100Kg) from SST-01 shall be collected in Sludge Sumps (SSs-01) then sludge shall be pumped to Filter Press (FP-01) for sludge dewatering. Then, dewatered sludge shall be collected in Sludge Dying Bed (SDBs-01-A/C) for further drying. Then, dried sludge shall be stored in HWSA and then finally disposal of to TSDF. Leachate from FP-01, SDBs-01-A/D and backwash from PSF-01 and ACF-01 shall be sent back to CNT-01 for further treatment.

Sr. No	Parameter	Untreated/ Raw Wastewater	After Primary Treatment	MEE Condensate	After Tertiary Treatment	Norms C- ETP Sarigam
1	рН	4.0-5.0	6.5-7.5	6.5-7.5	6.5-7.5	6.5-8.5
2	COD (mg/L)	25000	21000	3000	800	1000
3	BOD (mg/L)	3000	2500	375	80	400
4	TDS (mg/L)	45700	40000	200	1500	-

Expected Stream wise Characteristics of effluent :-

Note: (In case of CETP discharge) :

Management of waste water keeping in view direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act,

255th meeting of SEAC-Gujarat, Dated 05.08.2021

1974 issued by CPCB regarding compliance of CETP.

۶	Treated effluent will be sent to Sarigam C-ETP (Sarigam Clean Initiative) for further treatment and
	disposal to Marine Discharge System leads to Deep Sea at West Cost of Arabian Sea.

Brief note on adequacy of ZLD (In case of Zero Liquid Discharge):

- Not Applicable .
- Treated effluent will be sent to Sarigam C-ETP (Sarigam Clean Initiative) for further treatment and disposal to Marine discharge system leads to Deep Sea at West Cost of Arabian Sea.

In case of Common facility (CF) i.e. CETP, Common Spray dryer, Common MEE, CHWIF etc.	
Name of Common facility (CF) (For waste water treatment)	

Treated effluent will be sent to Sarigam C-ETP (Sarigam Clean Initiative) for further treatment and
 disposal to Marine discharge system leads to Deep Sea at West Cost of Arabian Sea.

Membership of Common facility (CF) mentioning total capacity, consented quantity, occupied capacity and spare capacity and norms of acceptance of effluent from member units in-line with the direction given by GPCB vide Letter No. GPCB/P-1/8-G (5)/550706 dated 08/01/2020.

D-7 Simplified water balance diagram with reuse / recycle of waste water



E	E-1 Brief Note on fuel based Heat energy requirement and worst case scenario thereof:										
		SR. NO.	NAM	e of fue	EL	TOT	AL PROPODED	QUANTITY			
		1.	Na	tural Gas			4240 SCM/E	Day			
		2		Diesel		2	250 Liter / D (1.7 Liter / hr)				
		Power Re	quirement								
		<u> </u>	SOURC	<u>E OF PO</u> DGVCL	WER	101	200 KVA	QUANTIY			
		2	D G Set (in	emergen	ergency only) 250 KVA						
			、 、	0							
Е	-2	Flue gas er	nission details								
		No. of Boilers/T	FH/Furnaces/DG sets	etc. with cap	acities viz. TPH,	Kcal/hr, MT/hr, KVA	etc.				
		(In case of Proj	ect located within CPA	/SPA , APCN	/I shall be in line t	o the mechanism pu	Iblished in the MOEFC	C's OM vide dated			
		31.10.2019)									
_							T	T1			
	Sr	Source c	of Emission	Stack	Type of	Quantity of	Type of	Air Pollution			
	no.	With C	Capacity	Height	Fuel	Fuel	i.e. Air	Control Measures			
				(meter))	WIT/Day	Pollutants				
	1	Steam Boiler	∩MT/br)∽		Natural	3840.0					
		1Nos	5 W17/11.JX		Gas	SCIVI/Day					
		Thermo Pack	(Capacity: 1.0		Natural	200.0		Adaguata Staak			
	2	Lac Kilo Cal/	hr.)	30	Gas	SCM/Day	PM <u><</u> 150	Adequate Stack Height			
╎┝		Gas Based H	, lot Air				mg/Nm				
	2	Generators	erators		Natural	200.0	002 <u>2</u> 100				
	3	(Capacity: 2,0	00,000	Gas		SCM/Day	NOx<50				
∣⊢		Kcal/hr.)					ppm	Adaquata Stack			
		D G Set 29	Stand By	11		250		Height			
	3	(Capacity : 28	50 KVA)		HSD	Liters/day		Ũ			
			-								
E	-3	Process gas i.e	e. Type of pollutant gases	(SO _{2,} HCI, NH	$_{3,}$ Cl _{2,} NO _x etc.)						
	Sr	Specifie	Source of omic	vion	Type of	Stack/Vent	Air Pollution (Control Measures			
	no.	(Name c	of the Product & Proces	SION SS)	emission	Height	(A	PCM)			
		Reaction Vo				(meter)					
	1	(2-Ethoxy Be	enzamide)		NH_3	11 meters	Two Stage Wa	ter Scrubber			
		Reaction Ver	ssel								
	2	(Nimesulide)		NO _x	11 meters	Two Stage Ca	ustic Scrubber				
		Reaction Ve	oxy 1-		11 motors						
	3	Indanone, 2,4,6-Trimethyl Benz			HCI	11 meters	Two Stage Wa	ter Scrubber			
		Reaction Ver	ssel (6-Methovy	8-Nitro							
	4	Quinoline, 2,	4,6-Trimethyl Be	enzoyl	SO ₂	11 meters	Two Stage Alk	ali Scrubber			
		Chloride)	-	-							

Note:	
	Details of gaseous raw materials used in proposed project
E-4	Fugitive emission details with its mitigation measures.
	Following measures will be adopted to prevent and control fugitive emissions
	1. Airborne dust at all transfers operations/ points will be controlled either by spraying water or
	providing enclosures.
	2. Adequate ventilation will be provided.
	3. Regular maintenance of valves, pumps, flanges, joints and other equipment will be done to
	prevent leakages and thus minimizing the fugitive emissions of VOCs.
	4. Entire process will be carried out in the closed reactors with proper maintenance of pressure
	and temperature.
	5. Periodic monitoring of work area will be carried out to check the fugitive emission.
	6. To eliminate chances of leakages from glands of pumps, mechanical seal will be provided at all
	solvent pumps.
	7. Stand by pumps will be provided on all scrubbers. Besides, scrubbers will be equipped with on-
	line pH meter with hooter system for better operational control.
	8. Close feeding system will be provided for centrifuges. Centrifuge and filtrate tank vents will be
	connected to vent chillers.
	9. Minimum number of flanges, joints and valves in pipelines.
	10. Regular inspection of floating roof seals and proper preventive maintenance of roofs and seals
	for tanks.
	11. Fugitive emission over reactors, formulation areas, centrifuges, chemical loading, transfer area
	will be collected through hoods and ducts by induced draft and controlled by scrubber/ dust
	collector.
	12. Dedicated scrubber will be provided are used for fugitive emissions to control.
	13. For dust emissions bag filter will be provided.
	Enclosures to chemical storage area, collection of emission from loading of raw materials in
	particular solvents through hoods and ducts by induced draft, and control by scrubber / dust collector
	to be ensured.

F	=	Hazardous	Hazardous waste									
		(As per the Haz	ardous and Other Wastes (Management and Trans	boundary Movem	ent) Rules 2016	б.						
		Note:										
		> Prio	rities for HW Management: Pre-proce	essing, Co-Pr	ocessing, F	Reuse/Recycle within						
		prer	premises, Sell out to actual users having Rule-9 permission, TSDF/CHWIH.									
		≻ Qua	ntification of hazardous waste shall b	e based on r	nass balan	ce and calculations shall be						
		inco	roorated in FMP details separately									
		Dior	veget to core venders/venders/trade	ra ia nat allou	vad							
				5 15 HUL AIIUW	leu							
1	1	Hazardous	waste management matrix	1	1							
	Sr. No	Name of Waste	Source of Generation	Cat No.	Propose d Quantity (MT/Ann um)	Disposal Method						
	1	Discarded Containers / Bags / Liners	Storage & handling of Raw Materials	Sch-l/ 33.1	20.0	Collection, Storage, Transportation, Decontamination & Disposal by selling to registered recycler.						
	2	Used / Spent Oil	Equipment & Machineries	Sch-l/ 5.1	15.0	Collection, Storage, Transportation, Decontamination & Disposal by selling to registered recycler.						
	3	Process Waste	Process (Hydroxy Novaldiamine, Lumefantrine, Ferrous Gluconate, Zinc Gluconate, Calcium Propionate, 4,7-Dichloro Quinoline)	Sch-I/ 28.1	6334.0	Collection, Storage, Transportation and disposal at nearest CHWIF.						
	4 Spent Carbon		Process (Hydroxy Chloroquine Phosphate, Hydroxy Chloroquine Sulphate, Azithromycin, Nimesulide, Diclofenac Sodium, Tinidazole, Mebendazole, Meta Amino Acetanilide, 2-Bromo 4-Fluro Acetanilide , 5,6- Dimethoxy 1-Indanone, 2-Ethoxy Benzamide, 2- Methyl 5- Nitro imidazole)	Sch-/28.1	336.0	Collection, Storage, Transportation and sent for co-processing in cement industries or nearest incineration site. (In case of non-operation of co-processing facility).						
	5 Distillation Residue		Process (Hydroxy Chloroquine Phosphate, Hydroxy Chloroquine Sulphate, Hydroxy Novaldamine, Azithromycin, Fenofibrate, Chlorhexidine Base, Nimesulide, Para Chloro Meta Xylenol, -(2- Phenoxy Phenyl) Methane Sulfonamide, 4,6-Di Chloro 5- Methoxy Pyrimidine, Meta Amino Acetanilide, 2-Bromo 4-Fluro Acetanilide, 2,4,6 Trimethyl Benzoyl Chloride, 5,6- Dimethoxy 1-Indanone, 6-Methoxy 8-Nitro	Sch-I/ 36.1	1151.0	Collection, Storage, Transportation and sent for co-processing in cement industries or nearest incineration site.						

		Quinoline)			
6	Spent Catalyst	Process (2- Methyl 5-Nitro imidazole)	Sch-I/ 28.1	6.0	Collection, Storage, Transportation & Disposal at Co-Processing or Common Incineration Site.
7	Spent Solvent	Process (Hydroxy Chloroquine, Hydroxy Chloroquine Phosphate, Hydroxy Chloroquine Sulphate, Hydroxy Novaldamine, Azithromycin, Lumefentrine, Fenofibrate, Chlorhexidine Base, Nimesulide, Diclofenac Sodium, Tinidazole, Mebendazole, Ferrous Ascorbate, 2,7-Dichloro-9-H, 4,7- Dichloro Quinoline Fluorene, N-(2- Phenoxy Phenyl) Methane Sulfonamide, 4,6-Di Chloro 5- Methoxy Pyrimidine, 2-Bromo 4- Fluro Acetanilide, 5,6- Dimethoxy 1-Indanone, 6- Methoxy 8-Nitro Quinoline, 2- Methyl 5-Nitro imidazole)	Sch-I/ 28.6	21,000	Collection, Storage, Management & Recovery within the premises and will reuse in plant premises.
8	Spent Sulphuric Acid	Process (N-Propyl Bromide, 6- Methoxy 8-Nitro Quinoline, 2- Methyl-5-Nitro Imidazole)	-	1508.0	Collection, Storage, Transportation & Disposal by selling to authorised end user registered under Rule-9.
9	Hydrochloric Acid Soln (30%)	Scrubber	-	1482.0	Collection, Storage, Transportation & Disposal by selling to authorised end user registered under Rule-9.
10	Ammonium Phosphate	Process (Hydroxy Chloroquine)	Sch-I/ 28.1	4560.0	Collection, Storage, Transportation & Disposal by selling to authorize end user registered under Rule-9.
11	Mono Ethyl Glycol	Process (Hydroxy Novaldamine)	Sch-I/ 28.1	120.0	Collection, Storage, Transportation & Disposal by selling to authorized end user registered under Rule-9.
12	20-25% Aluminium Chloride Soln	Process (Lumefentrine)	Sch-/28.1	3360.0	Collection, Storage, Transportation & Disposal by selling to authorized end user registered under Rule-9.
13	Sodium Chloride Salt	Process (Chlorhexidine Base, Divalproex Sodium)	Sch-I/ 28.1	1004.0	Collection, Storage, Transportation and disposal at common nearest TSDF site

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	Sr. No.	Type/ of Oth waste	/Name ner es	Specific Source of generation (Name of the Activity, Product etc.)	Specific Source Quantity of generation (Name of the Activity, Product etc.)		ntity Management of Wastes nnum)			
I-J	(MSW	and othe	ers): Not A	pplicable	μυσαι					
F-3			Ion-Hazar	rdous waste & ite die		μ.				
	for furt	her tree	atment 11	nit has applied for m	emberel	racility C	סם וכ	iox india F	mvate Limited Ankles	nwar
Detail	s of Men	nbershi	p letter no	b. & Date with spare	capacity	y of the C	comn	non Facility	y. Drivete Limited Ankles	huor
<u> </u>		BEI	L on date	d 21/07/21.						
		lndu	ustry is ob	tained NOC from TS	SDF site	of BEIL,	Dah	ej on dateo	d 21/07/21 and CHWI	F of
	(For H	IW manaq	gement)		-					
F-2	Merr	nbershi	p details (of TSDF, CHWIF etc					nearest TSDF.	
21	ETP SI	udge	ETP	ETP		Sch-l/ 35.3	/	150	Collection, St Transportation disposal at co	orage, and mmon
20	Salt from Evapora	m ator	MEE	MEE		-		260	Collection, St Transportation disposal at co nearest TSDF.	orage, and mmon
19	19 20% Liquid Ammonia		Scrubber			Sch-I/ 28.1	/	2069.0	Collection, Storage, Transportation & Dis by selling to authoriz end user registered Rule-9.	sposal zed under
18	18 Ammonium Sulphate		monium phate Process (Ferrous Fumarate, Zinc Gluconate)		Zinc	Sch-l/ 28.1	/	3288.0	Collection, Storage, Transportation & Dis by selling to authoriz end user registered Rule-9.	sposal zed under
17	Sodium Bromide	e	Process Acetanil	: (4-Bromo 2-Fluoro ide)		Sch-l/ 28.1	/	2700.0	Collection, Storage, Transportation & Dis by selling to authoriz end user registered Rule-9.	sposal zed under
16	Sodium Sulphat	te	Process	(Valproic Acid)		Sch-l/ 28.1	/	7476.0	Collection, Storage, Transportation & Dis by selling to authoriz end user registered Rule-9.	sposal zed under
15	15 Aluminium Hydroxide		Process Mebend	s (Diclofenac Sodium lazole)	Ι,	Sch-/ 28.1	,	684.0	Collection, Storage, Transportation & Dis by selling to authoriz end user registered Rule-9.	sposal zed under
14	20 % S Sulphite Solutior	odium e n	Scrubbe	Scrubber		Sch-l/ 28.1	/	4902.00	Collection, Storage, Transportation & Dis by selling to authoriz end user registered Rule-9.	sposal zed under

	1	ST	P Sludge STP	0.2		Used a within p	is manure in premises	Greenbelt	
-									
G	Solv	/ent r	management, VOC emi	ssions etc.					
G-1	Brie	f Not	e on types of solvents.	Details of Solv	ent recove	erv. % re	coverv. reus	e of recovere	ed
	Solv	/onts	etc			, , , , , , , , , , , , , , , , , , ,	, ,		-
	001		610.	1				1	
Dradu	a t	Sr.		Total Innut	Qty	of	Qty of	0/	0/
No	Cl	No	Raw Materials	Quantity (Ko) Recov	ered	Losses	‰ Recoverv	% Loss
		•			(Kg	j)	(Kg)	licectory	2000
Group	1		Synthetic Drugs	I		I		1	
		1.1	Hvdroxy Chloroquine						
		1	Methanol	3088	293	8	150	95.1	4.9
			Methylene Dichloride	6147	584	-0	307	95.0	5.0
		1.2	Hydroxy Chloroquine	Sulphate					
		1	Methanol	1700	153	0	170	90.0	10.0
		2	Methylene Dichloride	2430	222	20	210	91.4	8.6
		3	Ethyl Acetate	1880	178	0	100	94.7	5.3
		1.3	Hydroxy Chloroquine	Phosphate					
		1	Methanol	1700	153	0	170	90.0	10.0
		2	Ethyl Acetate	1126	107	3	53	95.3	4.7
		3	Methylene Dichloride	2497	225	51	246	90.1	9.9
		1.4	Hydroxy Novaldiamine	9					
		1	Toluene	2000	180	0	200	90.0	10.0
		2	Methylene Dichloride	3000	255	0	450	85.0	15.0
		3	Methanol	2100	180	0	300	85.7	14.3
		1.5	Azithromycin	1				1	
		1	Acetone	5000	480	0	200	96.0	4.0
		1.6	Lumefentrine						
	┝	1	Methanol	21410	1875	50	2660	87.6	12.4
		2	Di Metnyi Formamide	2200	187	0	330	85.0	15.0
		2	Ethyl Acetate	745	63	5	110	85.2	14.8
	_	3	N-Butanol	1630	155	0	80	95.1	4.9
			Methylene Dichloride	5213	445	3	760	85.4	14.6
		1.7	Fenofibrate			_			
	┝	1	Acetone	3000	280	0	200	93.3	6.7
		2	Isopropyl Alcohol	1500	140	0	100	93.3	6.7
		1.8	Chlorhexidine Base	44040			4465		
	┝	1	Butanol	11640	1048	80	1160	90.0	10.0
		2	Methanol	4790	431	0	480	90.0	10.0
		1.9	Nimesulide	0000					
		1	Methanol	2000	191	0	90	95.5	4.5

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	2	Toluene	3500	3410	90	97.4	2.6			
	2.0	Diclofenac Sodium		1	ſ	1				
	1	Toluene	3030	2880	150	95.0	5.0			
	2.1	Tinidazole								
	1	Benzene	1130	1070	60	94.7	5.3			
	2	Methanol	850	800	50	94.1	5.9			
	2.2	Methanol	3060	2750	310	80.0	10.1			
	2	Benzene	1570	1360	210	86.6	13.4			
	2.3	Diethyl Divalproex Soc	lium		2.0	0010	1011			
	1	Methanol	4340	4123	217	95.0	5.0			
	2.4	Ferrous Ascorbate		L.	I	L	1			
	1	Isopropyl Alcohol	400	380	20	95.0	5.0			
Group 2	Group 2 Pharmaceutical Intermediates									
	2.1 2,7 Di Chloro-9-H Fluorene									
	1	Methanol	800	750	50	93.8	6.3			
	2	Dimethyl Formamide	1000	970	30	97.0	3.0			
	2.2	4,7-Dichloroquinoline								
	1	Skellysolve 13208 11895 1313 90.1 9.9								
	2.3	N-(2-Phenoxy Phenyl) Methane Sulfonamide					1			
	1	Dimethyl Aniline	580	570	10	98.3	1.7			
	2.4	2- Methyl 5-Nitro imida	zole							
	1	Methylene Dichloride	2000	1900	100	95.0	5.0			
	2	Ethanol	2500	2400	100	96.0	4.0			
	2.5	4,6-Di Chloro 5-Metho	xy Pyrimidine			1	I			
	1	Methanol	2740	2590	150	94.5	5.5			
	2	Toluene	3000	2950	50	98.3	1.7			
	2.6	2-Bromo 4-Fluro Aceta	anilide							
	2	Toluene	1000	960	40	96.0	4.0			
	2.7	5,6- Dimethoxy 1-Inda	none							
	1	Methylene Dichloride	2470	2358	112	95.5	4.5			
	2	Ethylene Dichloride	3950	3790	160	95.9	4.1			
	3	Toluene	1742	1672	70	96.0	4.0			
	4	Iso Propyl Alcohol	1800	1728	72	96.0	4.0			
	2.8	4-Methoxy 2-Nitro Phe	nyl Amine							
	1	Ethyl Acetate	5625	5512	113	98.0	2.0			
	2	Methanol	2250	2200	50	97.8	2.2			

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	2.9	3-Chloro Propiopheno	ne					
	1	Methanol	5900	5500	400	93.2	6.8	
G-2	Brief Note on LDAR proposed:							

- Written LDAR program or SOPs for effective implementation and provision of leak detection & repair program.
- > Training will be provided to the persons involved in LDAR program.
- The detected leaks will be repaired within time bound. Frequency for monitoring leaks will be quarterly or monthly basis.
- > To repair leaking component unit will schedule the first attempt of leak program.
- > Record of calibration as well as maintenance activity will be maintained.
- > Using Gas Detector by PID Sensor technology
- Using Portable VOC analyzers
- Minimum use of Connectors & Joins
- Provide double condenser system
- Proper Handling of Drum
- > Proper Maintenance of valves, flanges, pumps

Product No.	Sr. No.	Raw Materials	Total Input Quantity (Kg)	Qty of Solvent Recovered (Kg)	Qty of Solvent Losses (Kg)	% Recovery	% Loss
Group 1		Synthetic Drugs					
	1.1	Hydroxy Chloroquine	Э				
	1	Methanol	3088	3042	46	98.5	1.5
		Methylene Dichloride	6147	6058	89	98.6	1.4
	1.2 Hydroxy Chloroquine Sulphate						
	1	Methanol	1700	1680	20	98.8	1.2
	2	Methylene Dichloride	2430	2393	37	98.5	1.5
	3	Ethyl Acetate 1880 1853 27 98.6					1.4
	1.3	Hydroxy Chloroquine	e Phosphate				
	1	Methanol	1700	1680	20	98.8	1.2
	2	Ethyl Acetate	1126	1109	17	98.5	1.5
	3	Methylene Dichloride	2497	2471	26	99.0	1.0
	1.4	Hydroxy Novaldiami	ne				
	1	Toluene	2000	1970	30	98.5	1.5
	2	Methylene Dichloride	3000	2960	40	98.7	1.3
	3	Methanol	2100	2068	32	98.5	1.5
	1.5	Azithromycin					

	1	Acetone	5000	4930	70	98.6	1.4
	1.6	Lumefentrine					
	1	Methanol	21410	21205	205	99.0	1.0
	2	Di Methyl Formamide	2200	2170	30	98.6	1.4
	2	Ethyl Acetate	745	734	11	98.5	1.5
	3	N-Butanol	1630	1600	30	98.2	1.8
		Methylene Dichloride	5213	5150	63	98.8	1.2
	1.7	Fenofibrate		1			
	1	Acetone	3000	2955	45	98.5	1.5
	2	Isopropyl Alcohol	1500	1477	23	98.5	1.5
	1.8	Chlorhexidine Base					
	1	Butanol	11640	11525	115	99.0	1.0
	2	Methanol	4790	4720	70	98.5	1.5
	1.9	Nimesulide					
	1	Methanol	2000	1970	30	98.5	1.5
	2	Toluene	3500	3460	40	98.9	1.1
	2.0	Diclofenac Sodium					
	1	Toluene	3030	3000	30	99.0	1.0
	2.1	Tinidazole					
	1	Benzene	1130	1115	15	98.7	1.3
	2	Methanol	850	837	13	98.5	1.5
	2.2	Mebendazole				I	
	1	Methanol	3060	3023	37	98.8	1.2
	2	Benzene	1570	1547	23	98.5	1.5
	2.3	Diethyl Divalproex S	odium			I	
	1	Methanol	4340	4297	43	99.0	1.0
	2.4	Ferrous Ascorbate		I			1
	1	Isopropyl Alcohol	400	394	6	98.5	1.5
Group 2		Pharmaceutical Inte	rmediates			I	70.0
	2.1	2,7 Di Chloro-9-H Fl	uorene				
	1	Methanol	800	788	12	98.5	1.5
		Dimethyl Formamide	1000	985	15	98.5	1.5
	2.2	4,7-Dichloroquinolin	е				
	1	Skellysolve	13208	13080	128	99.0	1.0
	2.3	N-(2-Phenoxy Pheny	yl) Methane Sulfo	namide			·
	1	Dimethyl Aniline	580	572	8	98.6	1.4
	2.4	2- Methyl 5-Nitro imi	dazole	I		I	
	1	Methylene Dichloride	2000	1980	20	99.0	1.0

_									_
		2	Ethanol	2500	2465	35	98.6	1.4	
	:	2.5	4,6-Di Chloro 5-Meth	noxy Pyrimidine					
		1	Methanol	2740	2712	28	99.0	1.0	
		2	Toluene	3000	2955	45	98.5	1.5	
		2.6	2-Bromo 4-Fluro Ace	etanilide					
		2	Toluene	1000	985	15	98.5	1.5	
		2.7	5,6- Dimethoxy 1-Inc	lanone					
		1	Methylene Dichloride	2470	2432	38	98.5	1.5	
		2	Ethylene Dichloride	3950	3900	50	98.7	1.3	
		3	Toluene	1742	1725	17	99.0	1.0	
		4	Iso Propyl Alcohol	1800	1773	27	98.5	1.5	
		2.8	4-Methoxy 2-Nitro P	henyl Amine		ſ			
		1	Ethyl Acetate	5625	5570	55	99.0	1.0	
		2	Methanol	2250	2217	33	98.5	1.5	
	2	2.9	3-Chloro Propiopher	none					
		1	Methanol	5900	5840	60	99.0	1.0	
G-3	V	OC e	mission sources and	its mitigation mea	asures				
 R risids R contract of lace C of lace C	We adop emp ISK AS sks inv lentified arting LOSE f chem itest teo ONDE o ensur CRUBI re store o the at nsure t OCAL opropri cheng us PE:- V mploye	will b beted loyee SSE volved of pro- SYS icals chno SYS icals chno BINC ed with that a EXH iately Ve w ees. T	be using various kind following mitigation is and there is no adv SSMENT:- We will be d, process hazards, a k. All the corrective in oduction activities. TEM HANDLING:- Th Whether it is dispen- logy in material handl R:- We will provide in at there is no unconde G:- All the process ve ill be connected to sci phere causing any he any escaping VOC is a AUST VENTILATION whenever any oper o scrubber. All the concerned em safety precautions to b will provide the best They will be trained in	Is of VOC during measures to ensi- verse effect due to a conducting deta and health hazar neasures sugges ne entire plant wi- ising, charging, fi- ing to ensure tha ninimum 2 conde ensed vapour esc- nts, receiver ven rubber appropriat ealth risk. Approp- absorbed. I:- We will also p n handling is invo- ployees will be ar- be taken while ch quality and all t effective use of f	g the proposed p sure that safe we o handling of VOG ail risk assessment ds and suggest ted in the risk as Il be designed or ltering, packing of t there is no expo- nsers to all the p aping in the work ts, tanks vents we ely to ensure that oriate Carbon bed provide local exh- olved it will be do dequately trained he required person PPE.	broducts manu orking condition C. Int of our propo- corrective means seessment will in the concept of or any other action of a	ufacturing. Bu ons are prov osed product asure to each be impleme of close syste ctivity we will rs with 2 diffe nosphere. nd hazardours are n the vent of n within the local exhaus hazards of th ve Equipmen	ut, we have ided to o s to identi- n and evented before em handling provide the erent utilities chemica creleased scrubber working a t ventilation e chemica at to all o	ve ur ify rr ng es als in to re our
• A	tmospł	neric	Distillation of Solvent	S:					

> Primary Condenser HE-01: Cooling Tower water or Chilled water (at 05 ⁰C) will be used to condense the

solvents depend on the vapour pressure at its operating conditions and the non-condensed vapour will be condensed in a Secondary Condenser Secondary Condenser HE-02: Chilled Brine at -15 ⁰C will be used to trap any traces of Solvent which is slipped from Secondary condense.

Н	SAFETY details			
H-1	Details regarding storage of H	lazardous chemicals		
	(For tank storages only including spent a	acid and spent solvent tanks)		
Sr. No.	Name of Hazardous substance mention concentration (if any)	Quar	ntity	Characteristics of Hazards Chemicals
		Maximum Storage	Actually Storage	
1	Sulphuric Acid	10 MT	8.0 MT x 1	Corrosive
2	Caustic Soda Lye 48 %	10 MT	8.0 MT x 1	Corrosive
3	Hydrochloric Acid	10 MT	8.0 MT x 1	Corrosive
4	MDC	10 MT	8.0 MT x 1	Corrosive
5	Liquid Bromine	10 MT	8.0 MT x 1	Toxic, Corrosive
6	Thionyl Chloride	10 MT	8.0 MT x 1	Toxic, Corrosive

Brief note on storage of Hazardous chemicals in Tanks

- > Tanker unloading Procedure is prepared and implemented.
- Caution note and emergency handling procedure is displayed at unloading area and trained all operators.
- Storage tank is stored away from the process plant.
- > Dyke wall is provided to all storage tanks, collection pit with valve provision.
- Double drain valve will be provided.
- Level gauge is provided on all storage tanks.
- > Fire hydrant system with jockey pump will be installed.

Brief note on storage of Hazardous chemicals other than Tanks i.e. Drum, Barrels, Carboys, Bags etc.

- Proper ventilation will be provided in storage area.
- Proper label and identification board / stickers will be provided in the storage area.
- > Drum handling trolley / stackers/ fork lift will be used for drum handling.
- Materials will be stored as per its compatibility study and separate area will be made foe flammable, corrosive and toxic chemical drums storage.
- Smoking and other spark, flame generating item will be banned from the gate.
- Static earthing will be provided.
- SS flexible hose / conductive hose will be used.

Safety details of Hazardous Chemicals:

Name of Hazardous substance	Safety Control Measures Provided
Methanol	Store house is well ventilated and at ambient condition.
Hexane	 SOP for storage & handling of the product. Availability of suitable fire extinguishers
Butanol	 Sprinkler system shall be provided Entry of Authorized personnel only
Acetone	Containers are kept tightly closed
Ethyl Acetate	

Chlorine Gas	 Stored in MS Cylinder Provision of ERU (Earth Relay Unit), flameproof electrical, lighting arrestor, etc Gas detection system. All flange joints on the lines are provided with jumpers. Safety Water Pit Shell load system Provision for SOP for storage & handling of the material
Hydrochloric Acid Sulphuric Acid	 Dyke wall will be provided. Dyke wall of sufficient size will be Provided in DD1 TFA. Tank, valve, pipeline will be checked And maintain, in good condition. Apron, Hand gloves, gumboot, goggles and helmet provided. Neutralizing agent shall be provided ISI Portable fire extinguisher will be provided. Scrubber system will be provided
Hydrogen	 Apron, Hand gloves, gumboot, goggles & helmet will be provided ISI Portable fire extinguisher & Hydrant line will be provided. Flame proof fitting provided. Sufficient Nos. of SCBA sets. Preventive maintenance on regular basis. Cylinder will be stored and used under Shed to protect from direct sun light.

> Applicability of PESO : Company will apply for PESO after getting EC & CTE.

H-2	Types of	hazardous Processes involved and its safety measures:
	(Hydrogenati	ion process, Nitration process, Chlorination process, Exothermic Reaction etc.)
-		
Type of F	Process	Safety measures including Automation
Hydroge process	enation :-	 Hydrogen Process Safety: 3 time Nitrogen purge into reactor to clean the reactor. Then charge material and hydrogen in reactor. Pressure of Hydrogen – 2 kg/cm². Auto damping system will be installed, in case power failure. Oxygen Detector will be installed. SPECIAL PRECAUTIONS FOR HANDLING HYDROGEN: CCE approved premises with door having locking arrangement provided. Protect cylinders against physical damage. Store in cool, dry, well-ventilated area, away from sources of heat, ignition and direct sunlight. Do not allow area where cylinders are stored to exceed 52°C (125°F). Isolate from oxidizers such as oxygen, chlorine, or fluorine. Use a check valve or trap in the discharge line to prevent hazardous backflow. Post "No Smoking or Open Flame" signs in storage and use areas. Cylinders can be stored in the open, but in such cases, should be protected against extremes of weather and from the dampness of the ground to prevent rusting. Never tamper with pressure relief devices in valves and cylinders. Electrical equipment should be non-sparking or explosion proof. Flammable high-pressure gas.

	10 Llos only in a closed system
	15. Use only in a closed system.
	tomporatures to be opequatered
	18 Cas can cause rapid suffection due to evugen deficiency
	10. Never work on a pressurized system
	20. If there is a leak, close the cylinder value. Blow the system down in a safe and
	20. If there is a leak, close the cylinder valve. Drow the system down in a safe and ocal any ironmontally sound manner in compliance with all federal, state, and local
	laws: then renair the leak
	21 Never place a compressed gas cylinder where it may become part of an electrical
	circuit.
	22. Apron, Hand gloves, gumboot, goggles & helmet provided.
	23. ISI Portable fire extinguisher & Hydrant line is provided as per TAC norms.
	24. Flame proof fitting provided & Sufficient Nos. of SBA sets & 2 No. of Air line
	mask.
	Following safety Measures will be taken while storage & handling of Hydrogen gas:
	25. Measures to be taken to prevent such accident: for H2 Rack Handling
	26. Hydrogen Cylinder rack will be parked in barricaded Separate area
	27. FLP Electrical Installation provide near storage area
	28. Vehicle allowed with Spark Arrestor
	29. No Smoking / Hot work allowed
	30. Trained staff
	31. Special Vehicle with Trained Operating staff for H2 Rack
	32. PPE Warned
	33. Spark proof tools used
	34. Safety shower, eye wash with quenching unit will be provided in handling /
	storage area.
	For H ₂ Cylinders
	35. Cylinder
	36. Separate Isolated Cylinder manifold
	37. HZ Cylinder stand with Chain link supporting
	30. Flamonroof Electrical Installation
	40 Spark proof Spanner set Earthing Grounding and Bonding on the Pipeline
	1 The Reactor will have Temperature control system cascaded with cooling water
Nitration	system consisting of Cooling tower, pumps and circulating system. In case of high
nitration	temperature the steam will get cut off and cooling water will start circulating through
process	the reactor coils. Alternately Chilled water system is also provided for extreme
	emergencies.
	2. The Reactor will have rupture disc and safety valves which will take care of excess
	pressure and the outlet of which is connected to the scrubbers.
	3. The Reactor will also have a separate high local vent with pressure relief valve
	which is connected to a catch pot with water. The catch pot contents will be separated
	for recycle purpose. This will be additional safety, if 1 & 2 fail at the same time, which
	is unlikely.
	FLP type area will be provided.
	Total enclosed process system.
	 Instrument & amp; Plant Air System.
	 Safety valve and Rupture disc provided on reactor.
Chlorination	Cooling Chilling and power alternative arrangement have been made on
nrocess	Reactor.
1 41000000	 PRV station with shut off valve, safety valve provision will be made for
	Chlorination reaction safety.
	Flame arrestor will be provided on vent line of reactor and it will be extended
	up to roof level.
	Open well ventilated and fragile roofs will be provided to on reactor.

		 Safe Catalyst charging method will I SOP will be prepared and operators Hood scrubber with blower, if any le Chlorine Kit Keep caustic solution 	be adopted. will be trained f akage	for the same	
H-3	Details of	Fire Load Calculation			
Total	Plot Area:			1864	ł Sg. m.
Area	Utilized for	plant activity:		72	29 m ²
Area	Utilized for	Hazardous Chemicals Storage:		52	25 m ²
Num	ber of Floor	S:		G	6 + 2
Wate	er requireme	ent for firefighting in KLD :		3.	8 KL
Wate	er storage ta	nk provided for Fire-fighting in KLD:		20	00 KL
Detai	ils of Hydrar	nt Pumps:		Ň	Yes
Near	est Fire Sta	tion :		Sa	rigam
Appli	cability of O	ff Site Emergency Plan:		Yes, Off Si Plan is	te Emergency prepared.
H-4	Details of	Fire NOC/Certificate:			
H-5	Details of	Occupational Health Centre (OHC):			
-		Number of permanent Employee :	20		
		Number of Contractual Person / Labour :	10		
		Area provided for OHC:	54		
		Number of First Aid Boxes :	5		
		Nearest General Hospital :	Sarigam Rota	ry Hospital	
		Name of Antidotes to be store in plant :	Milk of Magne	sia,	
			epicake syrup	, Novasine	
			Eye Drops		
Durin storaComr	ig meeting, ge in storag mittee found	Committee noted that PP presented SOP f e tank and membership of TSDF and CHWI I reply submitted by PP was satisfactory.	or handling of I F site.	nuge quantit	y of bromine and its

After detailed discussion, Committee unanimously decided to recommend the project to SEIAA, Gujarat for grant of Environment Clearance with the following specific condition:

SPECIFIC CONDITIONS:

- PP shall comply conditions of any subsequent amendment or expansion or change in product mix, after the 30th September 2020, considered as per the provisions in force at that time as mentioned in the Notification vide S.O. 1223 (E) dated 27/03/2020.
- PP shall carry out proposed project/activities in respect of Active Pharmaceutical Ingredients (API) as per the amended EIA Notification vide S.O. 1223 (E) dated 27/03/2020 and any subsequent amendments.
- PP shall submit six monthly compliance report of Environmental Clearance without fail and the same shall be critically assessed by the regulatory authority.
- PP shall strictly following standard operating procedure(SOP) for storage and handling of huge quantity of bromine in bromine storage tank as per SOP for bromine submitted by PP.
- 5. Unit shall install CEMS [Continuous Emission Monitoring System] in line to CPCB directions to all SPCB vide letter no. B-29016/04/06PCI-1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis. [For Small/Large/Medium (Red Category) & Whichever (Air emission & Effluent discharge) is applicable].
- Close loop solvent recovery system with adequate condenser system shall be provided to recover solvent vapours in such a manner that recovery shall be maximum and recovered solvent shall be reused in the process within premises.
- Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines.
 LDAR Logbooks shall be maintained.
- 8. All measure shall be taken to avoid soil and ground water contamination within premises.
- PP shall not commission production plant till common spray dryer facility of M/s. Umiya Enviro project LLP shall be obtained CCA of the Board for acceptance of effluent for evaporation.

<u>WATER</u>

- 10. Total water requirement for the project shall not exceed 50 KLD. Unit shall reuse 2 KLD of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 48 KLD and it shall be met through GIDC supply only. Prior permission from concerned authority shall be obtained for withdrawal of water.
- 11. The industrial effluent generation from the project shall not exceed 31.50 KLD.
- Industrial effluent shall be segregated into two streams (1) High COD and TDS effluent (2) Low COD and TDS effluent and it shall be managed as below.

• High COD and TDS effluent (24 KLD)

24 KLD, High COD and TDS effluent from process shall be treated in ETP-1 consists of Primary treatment units. Then treated effluent shall be evaporated in in-house MEE and 22 KLD, MEE condensate shall be further treated in low COD stream ETP.

• Low COD and TDS effluent (5 + 2.5 KLD):

- 5 KLD, Low COD effluent from utility and washing along with 22 KLD, MEE condensate shall be treated in ETP-2 and treated effluent shall be sent to CETP of GIDC Sarigam for further treatment and disposal.
- 2.50 KLD, exhausted scrubbing media shall be sold to end users having Rule-9 permission as per Hazardous Waste Rules'2016.
- 13. Unit shall feed wastewater to in-house MEE only after ensuring content of effluent for COD/VOC so as not to get air borne during evaporation in order to achieve no adverse impacts on Environment and Human Health.
- 14. Treated waste water shall be sent to common facilities (CETP) only after complying with the inlet norms of common facilities prescribed by GPCB to ensure no adverse impact on Human Health and Environment
- 15. Domestic wastewater generation shall not exceed 2 KL/day for proposed project and it shall be treated in STP. It shall not be disposed off through soak pit/ septic tank. Treated sewage shall be utilized for gardening and plantation purpose within premises after achieving on-land discharge norms prescribed by the GPCB.
- 16. During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, it shall be disposed in GIDC drainage.
- Unit shall provide buffer water storage tank of adequate capacity for storage of treated effluent during any emergency or shutdown of in-house MEE.

<u>AIR</u>

- 18. Unit shall not exceed fuel consumption and provide APCM and Stack height as mentioned in flue gas matrix.
- 19. Unit shall provide APCM and stack height as mentioned in process gas matrix.

HAZARDOUS & SOLID WASTE

- 20. All hazardous solid waste shall be managed as mentioned in hazardous waste matrix.
- 21. The unit shall submit the list of authorized end users of hazardous wastes along with MoU signed with them at least two months in advance prior to the commencement of production. In the absence of potential buyers of these items, the unit shall restrict the production of the respective items.

GREENBELT AREA

22. The PP shall develop green belt within premises (615 Sq. m i.e. 33 % of the total plot area) as per the undertaking submitted before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.

23. Safety & Health:

- a) PP shall obtain PESO permission for the storage and handling of hazardous chemicals.
- b) PP shall provide Occupational Health Centre (OHC) as per the provisions under the Gujarat Factories Rule 68-U.
- c) PP shall obtain fire safety certificate / Fire No-Objection certificate (NOC) from the concern authority as per the prevailing Rules / Gujarat Fire Prevention and Life Safety Measures Act, 2016.
- d) Unit shall adopt functional operations/process automation system including emergency response to eliminate risk associated with the hazardous processes.
- e) PP shall carry out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in the manufacturing area in case of any emergency or accident.
- f) PP shall install adequate fire hydrant system with foam trolley attachment within premises and separate storage of water for the same shall be ensured by PP.
- g) PP shall take all the necessary steps for control of storage hazards within premises ensuring incompatibility of storage raw material and ensure the storage keeping safe distance as per the prevailing guidelines of the concerned authority.
- PP shall take all the necessary steps for human safety within premises to ensure that no any harm is caused to any worker/employee or labour within premises.
- i) Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.
- j) Unit shall never store drum/barrels/carboys of incompatible material/chemical together.
- k) Unit shall provide effective Isolation for Process area and storage of hazardous chemicals.
- I) Unit shall provide water sprinkler to the ammonia storage cylinder.
- m) Unit shall provide effective fire hydrants, water monitors & foam application system at solvent storage tank farm area. Unit shall provide adequate safety system such as water sprinklers, water curtains, foam pouring system etc. to restrict cascade fire emergency in solvent tank farm.
- n) Unit shall provide a spare tank with emergency transfer system and bund/ dyke wall to Br2 storage tank.
- o) Unit shall provide safety valve and rapture disc, as well as auto dump or auto quench/, suppress system for nitration vessel safety.
- p) Unit shall provide chlorine leakage control emergency kit and FRP hood with scrubber system for chlorine safety.
- q) Unit shall provide safety valve & rupture disc to the Hydrogenation vessel.

3.	SIA/GJ/IND2/60892/2019	M/s. Shreeji Pigment	EC-Reconsideration
		Plot No. 5906/3A, GIDC, Ankleshwaar, Ta-	
I		Ankleshwar, Dist: Bharuch	
Cate	pory of the unit: 5(f)		

Project status: Expansion

- Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/60892/2019 on dated 02/03/2021 for obtaining Environmental Clearance.
- SEIAA issued TOR to PP vide letter dated 13/05/2019.
- Project proponent has submitted EIA Report prepared by M/s. Aqua Air Environmental Engineers Pvt. Ltd based on the TOR issued by SEIAA.
- This is an existing unit and now proposed for expansion in manufacturing of synthetic organic chemicals as mentioned below:

Sr.	Name of the	CAS no. /	Quantity			End-use
no.	Products	CI no.	MT/Month			of the
						products
			Existing	Proposed	Total	
1	Beta Blue	147-14-8	5.0	55.0	60.0	In Paint & Plastic Mfg. Industries.
2	Beta Blue (only through Ball Milling of CPC)	147-14-8	100		100.0	In Paint & Plastic Mfg. Industries.
3	Standardization of Pigments	147-14-8	50		50.0	In Paint & Plastic Mfg. Industries.
	Total		155.0	55.0	210.0	

- The project falls under B1 category of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for Video conference meeting for presentation on dated 01.06.2021.
- During the SEAC Video conference meeting dated 01.06.2021, Project Proponent (PP) and their technical expert and EIA consultant from M/s. Aqua Air Environmental Engineers Pvt. Ltd remain present and made technical presentation before the Committee.
- During the meeting, the project was appraised based on the information furnished in the EIA Report and details presented during the meeting.
- The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted for the study area of 10 km radial distance from project site for the period March 2019 to May 2019. Ambient Air Quality monitoring was carried out for PM₁₀, PM_{2.5}, SO₂, NOx, CO, HC and VOCs at Eight locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using "AERMOD". The resultant

concentrations are within the NAAQS. The modeling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).

- Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios
 has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan
 has been covered in the RA report.
- Upon asking regarding QCI/NABET accreditation for preparation of EIA preparation for proposed project, technical expert of PP informed that they have obtained QCI/NABET accreditation for preparation of EIA/EMP report as per the amended EIA Notification vide S.O. 648 (E) Dated 03.03.2016.
- This is an expansion project proposed for manufacturing of synthetic organic chemicals at GIDC Ankleshwar. Unit is having Valid CCA of the Board for existing plant. PP submitted CC&A compliance report for existing plant. Product profile with its end-use is discussed in depth. Source of water supply is GIDC. Committee noted that PP has addressed there is no legal court case, public complaint against unit. PP presented one closure order and one Show Cause Notice (SCN) issued by the Board and also unit obtained revocation of closure order from GPCB in year of 2016. Committee noted that PP has addressed area adequacy with layout plan for proposed project site.Upon asking regarding ata atime how many products will be manufactured, PP informed that they will manufacture one products at a time in Production plant.
- Committee deliberated on Process safety, area adequacy and layout plan, Fire safety, water balance & waste water management, Flue gas and process gas emission & Air Pollution Control System, Hazardous waste matrix, EMP, CER, LDAR and solvent recovery, Green belt, Risk assessment, baseline data etc.
- Committee noted the following:
 - ✓ PP has proposed total industrial effluent will be treated in ETP and then treated effluent will be discharged into GIDC drainage leading to FETP of M/s NCT for further treatment and disposal..
 - Domestic effluent will be treated in STP and treated sewage will be used for gardening purpose within premises.
 - ✓ Natural gas as fuel for Boiler and hot air generator.
 - ✓ There is no process gas emission.
 - ✓ Exhausted scrubbing media will be selling out as per the HW Rules.
 - ✓ PP submitted hazardous waste matrix mentioning source of generation, quantity and Mode of disposal and committed to comply the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules 2016.
- Committee asked for submission of following documents and information,
 - Submission of each and every specific ToR compliance report precisely with technical details of ToR accorded by SEIAA vide ToR letter dated 03/05/2019.
 - 2. Revised flue gas emission matrix with mentioning adequate stack height.

After detailed discussion, Committee unanimously decided to consider the project in one of upcoming meeting after submission of following documents:

- A. Submission of each and every specific ToR compliance report precisely with technical details of ToR accorded by SEIAA vide ToR letter dated 03/05/2019.
- B. Revised flue gas emission matrix with mentioning adequate stack height.
- PP submitted the reply of the said points of meeting dated 01.06.2021 along with other supporting documents.
- This proposal is reconsidered in SEAC meeting dated 05.08.2021. PP along with their technical expert/consultant from M/s Aqua Air Environmental Engineers Pvt. Ltd remains present in the meeting and made presentation before committee.
- PP submitted revised salient features of water, air and Hazardous waste management are as under,

Sr. no.	. Particu	llars					Det	Details	
А	PROJE	CT COST, EMP,	CER				I		
A-1	Total co	ost of Proposed F	Project						
	(Rs. in	Crores):							
		Existin	g	Propose	d	Total			
		1.0 Cr	ores	0.5 Cror	es	1.5 Cro	res		
		<i>c</i> 1							
	Break-L	Ip of proposed pr			Dropoo		Total		
		Details		rores)	(Rs. In C	rores)	(Rs. In C	rores)	
		Land	0.5	10165)	0	10165)	0.5	10165)	
		Building	0.4		0		0.4		
		Machinery	0.6		0		0.6		
A-2	Details	of Environmenta	I Managem	ent Plan	(EMP)		As	below:	
Sr. No	Unit	Detail	Capital Cost (Rs. In Crores)	Operat (Rs. In (ing Cost Crores)	Mainte Cost (Rs. In	nance Crores)	Total R Cost (Rs. In	Recurring Crores)
1 Waste Water		Primary treatment units and treated waste water will be sent to Treated effluent will be sent to	0.36		0		0	1	.10

		FETP of M/s. NCT, Ankleshw ar.				
2	Air	Cost of Dust Collector, stack installation , Spin Flash Dryer, & Cost of maintenan ce of APCM	0.05	0	0	0.059
3	Hazardous Management	Constructi on of Hazardou s waste storage yard	0.05	0	0	
4	Fire & Safety	Cost of Fire Hydrant System, fire extinguish er, fire proximity suites	0.38	0	0	0.02
5	AWH Monitoring	pH, COD apparatus, BOD Incubator, RDS, TDS meter, Flow Meter	0.10	0	0	0.02
6.	Green Belt Development	33 % of the plant area will be developed as greenbelt.	0.054	0	0	0.025

7.	Occupational Health	Cost of PPE, 1 Beds, Oxygen cylinder, & Antidote(OHC)	0.02	0	0		0.022					
8.	CER	,	0.015	0	0							
	Total		1.041	0	0		1.266					
A-3	Details of (Corporate En	vironment	Responsibility)	CER	As b	elow:					
	% as 1%	per the OM	Rs. in C	rores								
FUND Descri (2021-	FOR CER ACT ption 2023)					Am (INR ir	ount h Lakh)					
Green	belt developme	nt on village p	eripnery in	i Uchhali village		1	.5					
		Тс	otal			1.5	Lakh					
В	LAND/PLO	T AREA, GRE	EN BELT									
B-1	Land posse (Brief note reg Project propore	ession / Plot ov arding owner of the ent, Purpose of NA	Nnership d	etails: nection between Plot e. Industrial purpose	t/Land Holder and in case of outside	As b	elow:					
	GIDC.)											
B-2	GIDC.)											
B-2	GIDC.) Plot area	Exis	sting	Proposed	Total							
B-2	GIDC.) Plot area	Exis	sting Sq. m.	Proposed 0 Sq. m.	Total	m.						
B-2 B-3	GIDC.) Plot area Brief note o	Exis 2600 n Area adequ	sting Sq. m. acy in line	Proposed 0 Sq. m. to proposed pro	Total 2600 Sq. Dject activities	m.						
B-2 B-3	GIDC.) Plot area Brief note o Details of S	Exis 2600 n Area adequ torage of Raw	sting Sq. m. acy in line / Material,	Proposed 0 Sq. m. to proposed pro Products, Haza	Total 2600 Sq. Dject activities rdous waste a	m. : and Oth	ier					
B-2 B-3	GIDC.) Plot area Brief note o Details of S Total Storag	Exis 2600 n Area adequ torage of Raw ge required= \$	sting Sq. m. acy in line / Material, Storage of	Proposed 0 Sq. m. to proposed pro Products, Haza (Raw Material (Total 2600 Sq. Dject activities rdous waste a four days) + F	m. : and Oth	ner (15 Day) +					
B-2 B-3	GIDC.) Plot area Brief note o Details of S Total Storag Hazardous	Exis 2600 n Area adequ torage of Raw ge required= \$ Waste (3 Mor	sting Sq. m. acy in line / Material, Storage of nths)	Proposed 0 Sq. m. to proposed pro Products, Haza (Raw Material (1	Total 2600 Sq. Dject activities rdous waste a four days) + F	m. : and Oth Product	ier (15 Day) +					
B-2 B-3	GIDC.) Plot area Brief note o Details of S Total Storag Hazardous	Exis 2600 n Area adequ torage of Raw ge required= \$ Waste (3 Mor = 25 MT	sting Sq. m. acy in line Material, Storage of ths) + 105 MT	Proposed 0 Sq. m. to proposed pro Products, Haza (Raw Material (+ 1 MT + (Othe	Total 2600 Sq. Dject activities rdous waste a four days) + F	m. : and Oth Product	ier (15 Day) +					
B-2 B-3	GIDC.) Plot area Brief note o Details of S Total Storag Hazardous Total Storag	Exis 2600 n Area adequ torage of Raw ge required= \$ Waste (3 Mor = 25 MT ge required=	sting Sq. m. acy in line Material, Storage of ths) + 105 MT 131 MT	Proposed 0 Sq. m. to proposed pro Products, Haza (Raw Material (i + 1 MT + (Othe	Total 2600 Sq. Dject activities rdous waste a four days) + F	m. : and Oth Product	er (15 Day) +					
B-2 B-3	GIDC.) Plot area Brief note o Details of S Total Storag Hazardous Total Storag 152.4 m ² ar	Exis 2600 n Area adequ torage of Raw ge required= \$ Waste (3 Mor = 25 MT ge required= ea is available	sting Sq. m. acy in line Material, Storage of ths) + 105 MT 131 MT i for raw m	Proposed 0 Sq. m. to proposed pro Products, Haza (Raw Material (i + 1 MT + (Othe naterial and finis	Total 2600 Sq. Dject activities rdous waste a four days) + F	m. : and Oth Product	ier (15 Day) +					
B-2 B-3	GIDC.) Plot area Plot area Brief note o Details of S Total Storag Hazardous Total Storag 152.4 m ² ar Total Storag	Exis 2600 n Area adequ torage of Raw ge required= \$ Waste (3 Mor = 25 MT ge required= ea is available ge Capacity	sting Sq. m. acy in line Material, Storage of ths) + 105 MT 131 MT 3 for raw m = Area dee	Proposed 0 Sq. m. to proposed pro Products, Haza (Raw Material (+ 1 MT + (Othe paterial and finis dicated for (HW	Total 2600 Sq. Dject activities rdous waste a four days) + F er material) hed good stor + Raw Mater	m. and Oth Product	er (15 Day) + oduct) * Storace					
		= 24 * 3	3 (HW) + 187.4	*3 (Raw	material + F	Product -	+ Other)					
------------	---	--	----------------	------------	--------------	-----------	----------	--	--	--	--	--
		=72 (H	łW) + 562.2 (R	aw mater	ial + Produc	ct + Othe	er)					
		= 634.2	MT									
	Company has storage	capacity 634	4.2 MT/four da	ys but cor	mpany will r	equire 1	31 MT					
	So, Adequate Area will	be provided	d for Storage									
B-4	Green belt area											
		Exis	ting Pro	posed	Total							
			(Sq.	meter)	(Sq. met	ter)						
	Area ii	n 85	58	0	858							
	Sq. met	er										
	% of tot	al 33	%	0	33%							
	area											
	In case of GREEN-BELT partly outside premises, give complete details like exact											
	location (Lat-Long), Ag	location (Lat-Long), Agreement/MoU with specific area etc.										
С	EMPLOYMENT	EMPLOYMENT										
	Employment generatio	n details										
		Total										
		12	8		20							
	In case of Indirect emp	loyment, Gi	ve details.	1		1						
D	WATER											
D-1	Source of Water Suppl	у										
	(GIDC, Bore well, Surface wate	r, Tanker supply	v etc)									
	GIDC Water supply											
	Status of permission fr	om the cond	ern authority.									
	► GIDC/RM/ANK	/ALT/8239 d	lated:19/11/20	09								
D -	Water consumption (K	LD)										
D-2												
		Existing	Proposed	Total af	ter Re	emarks						
		KLD	(Additional)	Expans	ion							
	Category		KLD	KLD								
	(J) Domestic	2.5	0.0	25								
	(K) Gardening	1.0	0.0	2.0								
	(I) Industrial	1.0	0.0	1.0								
		35	12	47								
	Moobing	16.5	0.0	4.7								
	washing	10.0	0.0	16.5								

	Boi	ler 1.0		0.0		1.0		
	Cooli	ng 1.0		0.0		1.0		
	Othe	ers 0.0		0.0		0.0		
In	dustrial Total	22.	0	1.2		23.2		
G	rand Total (A+B+0	C) 25.	5	1.2		26.7		
В	rief Note on worst	case so	cenario	for water co	ทรเ	imption:		1
	 Worst case s Beta Blue fo 	scenario r high cc	for wate	er consumpti ion of water	on per	is based on o day	cons	idering
	Summary of	Exis	tina F	Proposed	1	Fotal after	Rer	narks
	water	KLD	(Additional)	E	Expansion		
	requirement		ĥ	(LD	ŀ	KLD		
		25.5	5 1	.2	2	26.7		
	Total water							
	requirement for							
	the project (A)							
	Quantity to be	0	C)	C)		
	recycled (B)							
	Total fresh wate	r 25.5	1	.2	2	26.7		
	requirement (C)							
R [S	Ensure Total wa i.e. A = B + C euse/Recycle deta Source of reuse &	iter requ ails (KLI applicat	D) with t	t = Fresh wa feasibility. a]		+ Recycled	wate	er
So	ource of waste	Applica	ation	Characte	eris	tics of waste	e R	Remarks
wa	ter for reuse in	area w	ith	water to	be	reused	re	egarding
KL	D (From where	quantit	y in KLI	D (COD, B	OD	, TDS etc.)	fe	easibility to
it is	s coming)	(Where	e it is				re	euse
		used)						

In	case of no reuse/rec	cycle of wa	ste water, Give	e brief note on jus	tification as	
wł	ny no reuse/recycle.					
	There will be no	o reuse as	Process efflue	nt and utility wast	e water will	
	be treated in E	TP and dis	posed to FETF	P,M/s.NCT		
D-3						
W	aste water generatio	n (KLD)				
		Eviating	Dropood	Total aftar	Domorko	
			(Additional)		Remarks	
C	togon	KLD		Expansion		
Ca	(C) Domostia	2.0	RLD	KLD		
	(G) Domestic	2.0	0.0	2.0		
	(L) Industrial					
	(H) Industrial					
	Process	34	0.0	34		
	Washing	16.5	0.0	16.5		
	Roilor					
	Cooling	0.1	0.0	0.1		
		0.0	0.0	0.0		
Ta				0.0		
		20.0	0.0	20.0		
<u> </u>		22.0	0.0	22.0		
		22.0	0.0	22.0	(1)	
rief justificatio	on in case of no pro		ent generation	or no industrial e	ffluent genera	ation or no
		ion nom pi	roposed projec	t (whichever is a	oplicable).	
		ol monting	point (Fulleting			
kisting and Propos				a Proposed)		
Domestic	: Domestic efflue	nt (2 KL/Da	ay) will be treat	ed in STP and se	ent to FETP o	f M/s.
	NCT, for final tr	eatment ar	nd final disposa	d		
Industrial	I: Process effluen	t (20 KL/Da	ay) and utility v	vastewater will be	treated in Pr	imary
	treatment and a	long with c	domestic waste	water sent to FE	TP (22 KL/D	ay)
	of M/s. NCT, for	r final treat	ment and final	disposal		
	 			-		
learly mention abo	out final disposal					
ETP (22 KL/	Day) of M/s. NCT, fo	or final treat	tment and final	disposal		
D-5 Tre	atment facilities					
or Domestic	waste water:					

Capacity of STP: 2 KL/Day

For Industrial waste water: Treatment facility within premises with capacity

[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc.

Treatment scheme including segregation at source. (Give Characteristics of each stream i.e. COD, BOD, TDS etc.) In case of stream segregation, Separate ETP (ETP-1, ETP-2....) for each stream shall be proposed.

M/s. Shreeji Pigment shall propose an Effluent treatment plant consisting of primary treatments. The details of ETP are as follows.

The company has provided Effluent Treatment Plant for treatment of industrial wastewater. The entire quantity of wastewater is collected in collection tank having neutral pH. From the collection tank effluent is pumped to the Plain Aeration tank, where air is purging by air compressor. Then effluent is transferring into the settling tank, where solid particles of Beta Blue are settling down and clear effluent from the top is passing through mixed Bed Filter. <u>Solid Particles from the bottom of the Settling Tank is our low Grade product (Beta Blue), which is recycled back in process or blending with Finished Product.</u>

The treated effluent after ensuring its quality finally discharged into deep sea via FETP of NCTL through underground drainage of GIDC, Ankleshwar.

BLOCK DIAGRAM FOR EFFLUENT TREATMENT PLANT





				Iotal Fresh Wa	ter required: 26	.7 KL/Day		
					\downarrow			
					·			
		Industrial: 2	23.2		G	ardening: 1.0	Dome	stic: 2.5
	Ī		*					
	Boi	ler: 1.0	↓ Cooling: 1.0	Pro	cess: 4.7	↓ Washing: 16.5	5	
		L						
	Boi	↓ ler: 0.1	↓ Cooling: Nil	Pro	vcess: 3.4	↓ Washing: 10	5.5 Dome	stic: 2.0
			↓		¥			
		<u>.</u>	· · ·	•			[
			Γ	ETP: 22.0 KL/	/D 4			SIP
			L					
			Г		CT			
				FETP, IVI/S. N				
E	Alf	२						
C-1	Bri	ef Note on fuel	based Hea	it energy re	quirement a	and worst cas	e scenario th	ereof:
C-1	Bri	ef Note on fuel	based Hea	t energy re	quirement a	and worst cas	e scenario th	ereof:
E-1	Bri Flu	ef Note on fuel	based Hea	t energy re	quirement a	ind worst cas	e scenario th	ereof:
E-1	Flu No.	ef Note on fuel	based Hea n details aces/DG sets e	tt energy rea	quirement a	Ind worst cas	e scenario th	ereof:
E-2	Flu No.	ef Note on fuel	based Hea n details aces/DG sets e	tt energy ree	quirement a	ind worst cas	e scenario th	ereof:
E-2 Existing	Flu No. 9 & Prop	ef Note on fuel	based Hea n details aces/DG sets e	tt energy rea	quirement a	Ind worst cas	e scenario th	ereof:
E-2 Existing Existing	Flu No. 8 Prop	ef Note on fuel le gas emission of Boilers/TFH/Furn posed	based Hea n details aces/DG sets e	tt energy rea	quirement a	Ind worst cas	e scenario th	ereof:
E-2 Existing Existing	Flu No. & Prop Sr. no.	ef Note on fuel le gas emission of Boilers/TFH/Furn posed Source of emission	based Hea n details aces/DG sets e Stack Height	t energy rea tc. with capacitie Type of Fuel	Quantity	Ind worst cas	Air Pollution	ereof:
E-2 Existing Existing	Flu No. & Prop Sr. no.	ef Note on fuel le gas emissior of Boilers/TFH/Furn posed Source of emission With Capacity	based Hea n details aces/DG sets e Stack Height (meter)	tt energy rea tc. with capacitie Type of Fuel	Quantity of Fuel MT/Day	/hr, MT/hr, KVA ef /hr, MT/hr, KVA ef emissions i.e. Air Pollutants	Air Pollution Control Measures	ereof:
E-2 Existing Existing	Flu No. & Prop Sr. no.	ef Note on fuel le gas emission of Boilers/TFH/Furn bosed Source of emission With Capacity	based Hea n details aces/DG sets e Stack Height (meter)	t energy real tc. with capacitie Type of Fuel	quirement a	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)	ereof:
E-2 Existing Existing	Flu No. & Prop Sr. no.	ef Note on fuel le gas emission of Boilers/TFH/Furn bosed Source of emission With Capacity Boiler (500 Kg/hr)	based Hea n details aces/DG sets e Stack Height (meter) 20	t energy real tc. with capacitie Type of Fuel Natural Gas	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM) Adequate Stack	ereof:
E-2 Existing Existing	Flu No. & Prop Sr. no.	ef Note on fuel le gas emission of Boilers/TFH/Furn posed Source of emission With Capacity Boiler (500 Kg/hr)	based Hea n details aces/DG sets e Stack Height (meter) 20	t energy rea tc. with capacitie Type of Fuel Natural Gas	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants PM: 150 mg/Nm SO_: 100	Air Pollution Control Measures (APCM) Adequate Stack Height	ereof:
E-2 Existing Existing	Flu No. & Prop Sr. no.	ef Note on fuel le gas emission of Boilers/TFH/Furn Dosed Source of emission With Capacity Boiler (500 Kg/hr)	based Hea n details aces/DG sets e Stack Height (meter) 20	t energy rea tc. with capacitie Type of Fuel Natural Gas	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants PM: 150 mg/Nm SO ₂ : 100 ppm	Air Pollution Control Measures (APCM) Adequate Stack Height	ereof:
E-2 Existing Existing	Flu No. & Prop Sr. no.	ef Note on fuel le gas emissior of Boilers/TFH/Furn Dosed Source of emission With Capacity Boiler (500 Kg/hr)	based Hea n details aces/DG sets e Stack Height (meter) 20	t energy rea tc. with capacitie Type of Fuel Natural Gas	Quantity of Fuel MT/Day	Type of emissions i.e. Air POIlutants PM: 150 mg/Nm SO ₂ : 100 ppm NOx: 50	Air Pollution Control Measures (APCM) Adequate Stack Height	ereof:
E-2 Existing Existing	Flu No. & Prop Sr. no.	ef Note on fuel le gas emission of Boilers/TFH/Furn Dosed Source of emission With Capacity Boiler (500 Kg/hr) Hot Air	based Hea n details aces/DG sets e Stack Height (meter) 20	t energy rea tc. with capacitie Type of Fuel Natural Gas	Quantity of Fuel MT/Day 40 m /hr	Type of emissions i.e. Air Pollutants PM: 150 mg/Nm SO ₂ : 100 ppm NOx: 50 ppm PM: 150	Air Pollution Control Measures (APCM) Adequate Stack Height	
E-2 Existing Existing	Flu No. & Prop Sr. no. 1	ef Note on fuel le gas emissior of Boilers/TFH/Furn Dosed Source of emission With Capacity Boiler (500 Kg/hr) Hot Air Generator	based Hea n details aces/DG sets e Stack Height (meter) 20	t energy real tc. with capacitie Type of Fuel Natural Gas	Quantity of Fuel MT/Day 40 m ³ /hr	Type of emissions i.e. Air Pollutants PM: 150 mg/Nm SO ₂ : 100 ppm NOx: 50 ppm PM: 150 3 mg/Nm	Air Pollution Control Measures (APCM) Adequate Stack Height Adequate Stack	
E-1 Existing Existing	Flu No. & Prop Sr. no. 1	ef Note on fuel le gas emission of Boilers/TFH/Furn- posed Source of emission With Capacity Boiler (500 Kg/hr) Hot Air Generator	based Hea n details aces/DG sets e Stack Height (meter) 20 20	tt energy rea tc. with capacitie Type of Fuel Natural Gas Natural Gas	Quantity of Fuel MT/Day 40 m /hr	Type of emissions i.e. Air Pollutants PM: 150 mg/Nm SO ₂ : 100 ppm NOx: 50 ppm PM: 150 mg/Nm SO ₂ : 100	e scenario th Air Pollution Control Measures (APCM) Adequate Stack Height Adequate Stack Height	
E-1 Existing Existing	Flu No. & Prop Sr. no. 1	ef Note on fuel le gas emission of Boilers/TFH/Furn- bosed Source of emission With Capacity Boiler (500 Kg/hr) Hot Air Generator	based Hea n details aces/DG sets e Stack Height (meter) 20	t energy rea tc. with capacitie Type of Fuel Natural Gas	Quantity of Fuel MT/Day 40 m /hr	Type of emissions i.e. Air Pollutants PM: 150 mg/Nm SO ₂ : 100 ppm NOx: 50 ppm PM: 150 3 mg/Nm SO ₂ : 100 ppm NOx: 50 ppm	e scenario th Air Pollution Control Measures (APCM) Adequate Stack Height Adequate Stack Height	

	Sr. no.	Sou em Wit Ca	urce of ission h pacity	Stack Height (meter)	Typ Fue	e of I	Quar of Fu MT/D	tity el ay	Type of emissions i.e. Air Pollutants	Air Polluti Control Measures (APCM)	on S
-	1	Spi Dry	in Flash /er	20	Nat Gas	ural S	20 m	³/hr	PM: 150 mg/Nm SO ₂ : 100	Adequate Stack Hei	e ight
									ppm NOx: 50 ppm		
E-3	Pr	ocess	S gasi.e. Type o	f pollutant ga	ases (S	0 _{2,} HCI, N	IH3, Cl2, N	O _x etc.)		
Existing &	& Pro	opose	ed	1		r		[1
	-	Sr. no.	Specific Source of emission (Name of the Product & Process)	Type emissio i.e. A Polluta (SO2, HC etc.)	of ons ir ints ints i, Ci	Stack Hei (me	/Vent ght ter)		Air Pollution C Measure (APCM)	Control S	
	_	1				-	-				
		2									
 D E R T Y m 	etail stim equi otal) early nana	s of g ation remei -Not / gene geme	aseous raw of process g nt of the scru Applicale eration of all nt in HW ma	materials as emissi Ibbing me bleed liqu trix.	usec ion (F edia (uors (d in pro Product KL per (MT/KL	posed wise a Day) c per Ar	proje Ind T Ionsie	ect otal) dering solubilit) as mentione	ty (Product d above ar	wise and nd its sound
E-4	F	ugitiv	e emission o Airborne de spraying wa Raw materi	letails wit ust at al ater or pro als loadir	h its I trai ovidin ng an	mitigati nsfers ng enclo d unloa	on me operat osures.	asure ions/ ill be	es. points will t done in cover	e controlle	ed either by
		\checkmark	Care will b emissions,	e taken if any.	to s	tore co	onstruc	tion	material prop	erly to pre	event fugitive
		>	Regular ma	aintenanc prevent le	e of eakag	valves, ges anc	pump I thus r	s, fla ninim	nges, joints a nizing the fugit	nd other ea ive emissic	quipment will
		~	Entire proce of pressure	ess will b and temp	e car perat	ried ou ure.	t in the	e clos	sed reactors w	vith proper	
			To eliminate	e chance	of wo s of l	гк area eakage	will be s from	carr glan	ied out to che ids of pumps,	ск the fugiti mechanica	ive emission. al seal will be

	prov	Ided at all solv	vent pumps.			. P	
	> Mini	mum number	of flanges, jo	pints and v	alves in pipe	elines.	
	> Encl	osures to che	emical storaç	ge area, c	ollection of e	emission	trom loading of r
	mate	erials in partic	ular solvent	s through	hoods and	ducts b	y induced draft, a
	cont	rol by scrubbe	er / dust colle	ector to be	ensured.		
	> Adeo	quate ventilati	on will be pr	ovided.			
	Perie	odic monitorin	g of work ar	ea will be	carried out t	o check	the fugitive emiss
	as p	er the norms of	of Gujarat Fa	actory Rule	es.		
F	HAZARDOL	JS WASTE					
Hazardou	us waste Mana	gement					
(As per the ⊦	lazardous and Other	r Wastes (Manager	nent and Transb	oundary Move	ment) Rules 201	6.	
Note:							
> Pi	riorities for HW	Management	: Pre-proces	sing, Co-F	Processing, I	Reuse/R	ecycle within
pr	emises, Sell ou	ut to actual us	ers having R	lule-9 perr	nission, TSE	F/CHW	IH.
≻ Q	uantification of	hazardous wa	aste shall be	based on	mass balan	ce and c	calculations shall b
in	corporated in F	MP details se	parately				
יח <i>ב</i> ו	isposal to scrar		dore/tradere	is not allo	wed		
					weu		
F-1	Hazardous	waste manag	ement matri	x			
Existing 8	& Proposed						
Sr.	Type/Name Specific	Specific	Category	Quantity			Management
no.	Hazardous	deneration	Schedule	(ivi i / Annum)		
	waste	(Name of the Activity, Product etc.)	as per HW Rules.	Existing	Proposed	Total	
1	Discarded containers /Drums / Bags / Liners	Raw Material Containers /Bags	Sch-(I)- 33.1	6.0	2.0	8.0	Decontamina tion, Storage, Transportatio n and Reuse / Sale to authorized
							Vendor
2	ETP Waste	From ETP	Sch-(I)- 35.3	0.3	3.3	3.6	Scrap Vendor Collection, Storage, disposal by Reprocess / Blend with finished product (Beta Blue).

	IVICI	nbersnip detai	s of TSDF, C	HWIF etc.				
	(For I	HW management)						
Details of	f Memb	ership letter n	o. & Date with	spare cap	pacity of the	Commo	n Facility.	
> N	ot appl	icable						
F-3	Det	ails of Non-Ha	zardous waste	e & its disp	osal			
	(MSV	V and others)						
	Sr. no.	Type/Name of Other wastes	me Specific Quantity Source of (MT/Annum) generation (Name of the Activity.		Total	Management of Wastes		
	1							
G	SOI	 _VENT MANA(GEMENT, VO	C EMISSI	ONS etc.			
G-1	Brie	f Note on type	s of solvents.	Details of	Solvent reco	overy, %	recovery, reuse	of
	reco	overed Solvent	s etc.					
> N	ot appl	icable as there	shall he no 9	Solvent de	nerated			
J-2	BLIE							
> N	ot appl	icable, as there	e shall be no S	Solvent ge	nerated			
G-3	VO	C emission sou	irces and its r	nitigation r	neasures			
and VOC Solid 	s. raw ma	aterial charging	y will be done	through cl	and overage	٦.		
 Entire tempo Close Fugiti will b collec Contr Cond Enclo partic collec Prope seals Minim Prope 	e proce erature e feedir ive emi e collector. fol by h enser t sular so ctor to k er mair etc. num nu er gland	ss will be carri ag system will b ission over rea ected through aving proper s to trap VOC. to chemical si povents through the ensured. atenance sche- mber of flange d packing will b	ed out in the ope provided for actors, formula hoods and d crubbing syste torage area, h hoods and dule will be a s, joints and w	closed rea r centrifug ation area lucts by in em. collection ducts by adhered to valves in p I for pump	osed system ctors with pr es. s, centrifuge nduced draf of emission induced draf avoid emis pavoid emis ipelines. s and valves	roper ma es, chem t and c from lo raft, and ssions th s and to	aintenance of pre- nical loading, tran ontrolled by scru bading of raw ma d control by scru nrough flange join the extent possib	ssure and sfer area ibber/dusi aterials in ibber/dusi nts, pump
 Entire tempo Close Fugiti will b collect Contribution Condi Enclois partice collect Prope seals Minimis Prope with n All the 	e proce erature e feedir ive emi ive collector. ol by h enser t osures cular so cor to k er mair etc. num nu er gland nechar e raw n tating of	ss will be carri ag system will be assion over rea- ected through aving proper s- to trap VOC. to chemical si- olvents through be ensured. atenance sche mber of flange d packing will be adding seal. naterials will be equipments lik	ed out in the ope provided for actors, formula hoods and d crubbing syste torage area, h hoods and dule will be a s, joints and w be maintained e pneumatical e pumps will	closed rea r centrifug ation area: lucts by in em. collection ducts by adhered to valves in p l for pump l for pump	osed system ctors with pr es. s, centrifuge nduced draf of emission induced draf avoid emis pavoid emis ipelines. s and valves to the reacted ad with med	roper ma es, chem t and c from lo raft, and ssions th s and to or. hanical	aintenance of pre- nical loading, tran ontrolled by scru bading of raw ma t control by scru nrough flange join the extent possib seals to arrest a	ssure and sfer area lbber/dus aterials ir lbber/dus nts, pump ole pumps
 Entire tempo Close Fugiti will b collect Contr Cond Enclo partic collect Prope seals Minim Prope with n All the emiss A reg joints Period 	e proce erature e feedir ive emi e collector. ol by h enser t sures cular so ctor to b er mair etc. num nu er gland nechar e raw n tating ular pr etc. as dic mol	ss will be carri ag system will be assion over real acted through aving proper s to trap VOC. to chemical se olvents through tenance scher mber of flange d packing will be acterials will be equipments lik eventive maint s a part of ISO nitoring of work	ed out in the ope provided for actors, formula hoods and d crubbing syste torage area, h hoods and dule will be a s, joints and w pe maintained e pneumatical e pumps will cenance scher systems to en c area will be o	closed rea r centrifug ation area: lucts by in em. collection ducts by adhered to valves in p l for pump ly transfer be installe dule will b isure no fu carried out	osed system ctors with pr es. s, centrifuge nduced draf of emission induced draf o avoid emis ipelines. s and valves to the reacte ed with mec e in place to igitive emiss t to check th	roper ma es, chem t and c from lo raft, and ssions th s and to or. hanical o replac ions tak e fugitive	aintenance of pre- nical loading, tran ontrolled by scru bading of raw ma d control by scru nrough flange join the extent possik seals to arrest a e or rectify all ga e place. e emission.	ssure and sfer area, ibber/dust aterials in ibber/dust nts, pump ole pumps ny sort of skets and

	HEA	ALTH & SAFETY									
-1	Deta	ails of Occupational Hea	alth Centre (OHC)	:							
		Number of perr	nanent Employee	:	15						
		Number of Con	tractual person/L	abour :	5						
		Area provided f	Area provided for OHC:								
		Number of Firs	Number of First Aid Boxes :								
		Nearest Generation	Nearest General Hospital :								
				Emer	gency Centre						
		Name of Antido	Name of Antidotes to be store in plant :								
				soda ash solution							
				while	stirring it. and then						
				dilute it with a							
					large quantity of water						
-2	Deta	ails regarding storage of	Hazardous chen	nicals							
	(For t	(For tank storages only including spent acid and spent solvent tanks)									
	-	Nome of Chamical	Canacity of	Number		Llozordovo					
	51. 110	Name of Chemical	Capacity of	Tanks	OI	Characteristi					
			Idink	Tanks		of Chemical					
	1	Not Applicable									
rief I	ote on sto	brage of Hazardous che	micals in Tanks								
\triangleright	Not Appl	icable									
rief ı	ote on sto	brage of Hazardous che	micals other than	<u>Tanks i.e.</u>	<u>Drum, B</u>	arrels, Carboy					
tc.											
	Proper v	entilation will be provide	d in storage area	•							
	Proper la	abel and identification bo	oard /stickers will	be provide	d in the	storage area.					
	Conducti	ivo drum pollote will bo i	arovidad								

- > Drum handling trolley / stackers/forklift will be used for drum handling.
- > Separate dispensing room with local exhaust and static earthing provision will be made.
- > Materials will be stored as per its compatibility study and separate area will be made for

flammable, corrosive and toxic chemical drums storage.

- > FLP type light fittings will be provided.
- Smoking and other spark, flame generating items will be banned from the Gate.

Safety details of Hazardous Chemicals:

Type of	Safety measures
Hazardou	S
Chemical	5
Hvdrochlo	 Wear a chemical-resistant apron, chemical-resistant gloves and
Acid	chemical splash goggles at all times when handling HCl to protect
	vour eves and skin.
	 Concentrated bydrochloric acid is toxic if inhaled, so avoid
	breathing it in and always handle it while under a fume hood.
	Determine if you can use a less bazardous substance than
	hydrochloric acid
	Ensure that a written experimental protocol including safety
	information is available
	 Identify the location of the nearest evewash and shower and verify
	that they are accessible
	 Locate and verify that appropriate spill cleanup materials are
	available, including the following:
	 PPE: acid gloves (see "During Work" section below).
	 safety glasses and face shield and an acid apron over a lab coat
	Acid neutralizer
	A plastic scrapper (if acid neutralizer is a solid material)
	 Universal absorbent pads if acid neutralizer (with color indicator)
	is a liquid
	 Hazardous waste bags and hazardous waste labels
> App	licability of PESO :
H-3	Types of hazardous Processes involved and its safety measures:
	(Hydrogenation process, Nitration process, Chlorination process, Exothermic Reaction etc.)
-	
Type of	Safety measures including Automation
Process	

-4	Details of Fire Load Calculation					
	Total Plot Area:	2600 Sq. mt.				
	Area utilized for plant activity:	152.4 Sq. mt				
	Area utilized for Hazardous Chemicals Storage:	135.6 Sq. mt.				
	Number of Floors:	G+2 floor				
	Water requirement for firefighting in KLD :	50 KLD*2				
	Water storage tank provided for firefighting in KLD:	100 KLD				
	Details of Hydrant Pumps:	Kirlosker make one fire pump (15 m ³ /hr-88 meter head) and One Jocky pump (12 m ³ /hr - 63 meter head) will be provided				
	Nearest Fire Station :	3.6 Kms- DPMC Fire station				
	Applicability of Off Site Emergency Plan:	 Available specialized equipments of fire fighting equipments, breathing apparatus, cranes, dozens ambulance etc. Plans of evacuation, safe routes, medical treatment and rehabilitation. 				

During meeting, Committee noted that PP has addressed specific ToR compliance and revised flue gas emission matrix with mentioning adequate stack height. Looking to ToR compliance for CER showing only details of tree plantation in Uchchhali village but Uchchhali gram panchayat letter not submitted by PP, ToR regarding renewable energy showing general details in place of utilization of renewable energy considering maximum extent for proposed project and area adequacy with land break up and layout plan with color coding for existing and proposed infrastructure, Hazardous chemical and raw material storage considering type of Hazard and worst case scenario.

After detailed discussion, Committee unanimously decided to consider the project in one of

upcoming meeting after submission of following documents:

- Readdress ToR no-2 for expansion project area adequacy along with revised layout plan with mentioning adequate size peripheral road and internal road ,color coding for existing and proposed infrastructure, storage area of Hazardous chemicals and raw material storage considering type of hazard and worst case scenario ,adequate details of storage tank to be installed and revised area adequacy considering it.
- Readdress ToR no-1 with Uchchhali village gram panchayat letter mentioning details oftree plantation area, mentioning longitude and latitude in place of simply mentioning tree plantation in Uchchhali village periphery and notarised undertaking for greenbelt development and its maintenance and conservation responsibility for green belt development, outside premises.
- 3. Readdress ToR no-3 with mentioning explore the use of renewable energy efficient to the maximum extent possible in place of general details of solar renewable energy.

9.	SIA/GJ/IND2/54930/2020	M/s. I	KINJAL	EC-Reconsideration				
		Plot	No.	C/1/B-145/1,	GIDC	Estate,	Naroda	
		Ahme	dabad	, Gujarat-38233	0			

Category of the unit: 5(f)

Project status: New

- Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/54930/2020 on dated 30.09.2020 for obtaining Environmental Clearance.
- SEIAA issued TOR to PP vide their letter dated 05/06/2020.
- Project proponent has submitted EIA Report prepared by B.S.Rana based on the TOR issued by SEIAA.
- This is a new unit proposes for manufacturing of synthetic organic chemicals as below:

Sr.	Name of the	CAS no. /CI	Quantity	End-use of products
1	Resist salts	127-68-4	200	It is used for Manufacturing various Intermediate for Dyes, Oxidizing Agent for Electroplating, Auxiliary for Printing Fabrics.
2	Metanilic Acid Liquid	121-47-1	200	It is used in printing on paper, dyeing on fibres, silk, Wool, nylon, silk, paper, ink, aluminum, detergent, wood, fur, cosmetics, biological stain etc
3	Aniline 2-5 Disulphonic Acid	98-44-2	400	It is used as Intermediate of Dye Stuffs, Optical Whitening Agent, Acid Film Orange P
4	Aniline 2-4 Disulphonic	137-51-9		It is used as Lubricants, food;

		Acid			Physical Form Powder.
Ī	5	Metanilic Acid	121-47-1	200	To manufacture various Dyes &
		Powaer			Dyes intermediate
		Meta Amino Phenoi	591-27-5		(diethylamino)phenol, key
					intermediate for the preparation
					of several <u>fluorescent dyes</u> . It is
					used as hair dye colorants
					and stabilizers for chlorine-
Ē		Total		1000 MT/Month	
ŀ	Note	600 MT/Month (Worst-	rase scenario	- considering 2 pro	oducts can be manufacturing at a
				time.)	

- The project falls under B1 category of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for presentation on SEAC video conference meeting dated 10.02.2021.
- During the SEAC Video conference meeting dated 10.02.2021, Project Proponent (PP) and their technical expert and EIA consultant, B. S. Rana remain present and made technical presentation before the Committee.
- This is Greenfield project proposal for manufacturing of Synthetic Organic Chemicals at GIDC Naroda.
 Source of water supply is GIDC.
- Upon asking regarding QCI/NABET accreditation for preparation of EIA preparation for proposed project, technical expert of PP informed that they have not obtained QCI/NABET accreditation for preparation of EIA/EMP report as per the amended EIA Notification vide S.O. 648 (E) Dated 03.03.2016. Also technical expert of PP informed that they have submitted EC application for proposed project before 24/11/2020 in which minutes of meeting of MoEF&CC (IA Division-Industry-2 Chemical Sector) shown that MOEFF&CC has insisted on QCI/ NABET accredited consultants and refused to consider/ entertain the proposals which were not prepared by QCI/ NABET accredited consultants. Committee asked for chronology of proposed project EC application starting from obtaining ToR for proposed project and primary data and secondary data baseline data used in EIA preparation.
- Committee observed that details submitted as disclosure of consultants is inadequate. They have not mention EIA Co-Coordinator and specific area experts.
- Details furnished in EIA/EMP report are very sketchy and does not provide sufficient information regarding Environmental Management, Safety and Health aspects.
- Committee observed that reports/submissions are distinctly deficient in quality, are not reflecting environmental concerns and the projected scenario for all the environmental components and its mitigation measures.
- After deliberation, SEAC unanimously decided to defer the proposal and consider the same in one of the upcoming meeting of SEAC after satisfactory submission of following details:
 - 1. Authenticated documents regarding Consultants/Laboratory which primary and secondary data utilization for preparation of EIA report for proposed project and chronology of proposed project EC

application starting from obtaining ToR for proposed project.

- 2. Details submitted as disclosure of consultants for EIA Co-Coordinator and specific area experts for preparation of EIA report is inadequate.
- PP submitted the reply of the said points along with other supporting documents.
- This proposal is reconsidered in SEAC meeting dated 12.04.2021. PP along with their technical expert/consultant from M/s B S Rana remains present in the meeting and made presentation before committee.
- During meeting dated: 12.04.2021, PP presented the following details:
 - ✓ Chronology of TOR and EC applications.
 - ✓ High court stay order regarding QCI/NABET accredited consultant.
 - ✓ Certificate of NABL accredited laboratory.
 - ✓ Details of EIA Co-Coordinator and specific area experts.
 - Revised Site Plan/ layout with floor plans and with provision of 4 m wide peripheral road for emergency exit, OHC (50 Sq m), production plant, utility, ETP, tank farm areas, 33 % greenbelt within premises, etc. pon asking regarding provision of two stircase of 2 m width on opposite sides for emergency exit on each floor, PP could not reply satisfactorily.
 - Product profile with specific end-use of product. PP presented that at a time, any two product can be manufactured. Upon asking regarding maximum quantity of product that can be manufactured at a time, PP could not reply satisfactorily.
 - ✓ Details of storage of hazardous chemicals in tanks i.e oleum, HCl, Sulhuric acid etc. Upon asking regarding spare of oleum with its safety measures, PP could not reply satisfactorily.
- Committee noted that there are mistakes in presentation made by the consultant and PP was flagging the error and informed the Committee that they have earlier asked the consultant to correct the information before submitted it to SEAC. Committee noted that there is an issue of lack of congruence between the Project proponent and the Consultant.
- Committee also observed that the details regarding total capacity of products and raw materials are mismatching. Committee felt that deliberate errors, if addressed can go a long way in reducing the timelines. Committee emphasized that improved report will not only reduce the timeline with respect to appraisal process of SEAC but will also improve the credibility of Consultants. Looking to the casual approach of the EIA consultant and raising confusion by providing inadequate information, Committee unanimously decided to stop the presentation.

After deliberation, Committee decided to defer the case again and consider the proposal in one of the upcoming SEAC meeting after submission of revised presentation.

- PP submitted their reply for the query raised by SEAC during SEAC meeting dated 12.04.2021 through email.
- The proposal was reconsidered in the SEAC video conference meeting dated 17.06.2021.
- During the meeting dated 17.06.2021, the project was appraised based on the information furnished in Form

- 1, Pre-Feasibility Report, Environment Management Plan and details submitted by e-mail.
- Project proponent (PP) and their Technical Expert from M/s. B.S.Rana remains present during video conference meeting.
- Committee noted that technical expert of PP presented reply of query is quite different from query raised by Committee members during meeting dated 12/04/2021.Hence Committee asked this type of mistake is considered as serious matter and due to such type of mistake project proponent is suffered due to delay for hears appraisal case. Then after request of project proponent, Committee members agree for heard appraisal case.
- Committee noted the following:
 - ✓ Product profile discussed in depth. PP informed that they have submitted revised product profile with discontinue of Resorcinol as product.
 - Site Plan/ layout with fire plan & floor plans with provision of separate entry & exit. Also presented area adequacy for storage of finished goods, raw material, drums, tank farm and hazardous waste, etc. Layout plan showing different number of storage tank and land break up for area adequacy showing different storage tank for hazardous chemical storage.
 - Total industrial effluent will be segregated and high COD stream will be sent to common spray dryer facility after ETP and RO plant treatment and low COD stream will be reused back in process after ETP and RO plant treatment.
 - ✓ Natural gas is proposed as fuel for boiler, TFH and HAG but adequate stack is not proposed for it.
 - ✓ Two stage scrubbing system as APCM proposed for each process stack.
 - ✓ EMP in which not mentioned auto control cost for critical process like sulphonation.
 - PP has not submitted changes made due to removal of Resorcinol product from product profile in Water, Air, Hazardous waste, EMP and greenbelt area.

Looking to presentation submitted by technical expert of PP is found inadequate, Committee asked to submit (1) Revised layout plan with mentioning adequate size peripheral road and internal road, revised green belt area, secure distance of storage area of Hazardous chemicals from proposed process area ,adequate details of storage tank to be installed and revised area adequacy considering it (2) Details regarding changes in Water, Air, Hazardous waste and EMP before removal of Resorcinol product and after removal of Resorcinol product from product profile in tabular form and Addendum to changes made in EIA report due to removal of Resorcinol as product (3) Revised EMP with mentioning adequate auto control cost for critical process and fire hydrant network and fire extinguisher cost in EMP(4) revised air matrix with adequate fuel consumption details considering capacity of boiler and adequate stack height for it (4) adequate details of risk assessment for Hazardous chemicals storage and its mater on surrounding habitat and its mitigation measures for proposed project . (5) Readdress specific ToR for renewable energy adoption for proposed project instead of general details of it. (6) Membership certificate of Common spray dryer for effluent disposal like booked load quantity in KL/Day, spare capacity, Consented capacity etc and TSDF site membership certificate for Hazardous Waste disposal.

After presentation made by technical expert of PP, Committee felt that eventhough many times informed technical expert of PP regarding adequate presentation and document submission like adequate common facility membership certificate for effluent and Hazardous waste disposal, technical expert of PP comes in meeting without preparation for proposed project and this project is heard many times by Committee and still no positive output comes for proposed project appraisal case. Hence Committee members informed technical expert of PP for last chance given to heard this project only after come with proper preparation for proposed project along with adequate document like valid and adequate common facility membership certificate and presentation of proposed project

After detailed discussion, Committee unanimously decided to consider the project in one of upcoming meeting after submission of following documents:

- Revised layout plan with mentioning adequate size peripheral road and internal road, revised green belt area, secure distance of storage area of Hazardous chemicals from proposed process area ,adequate details of storage tank to be installed and revised area adequacy considering it.
- Details regarding changes in Water, Air, Hazardous waste and EMP before removal of Resorcinol product and after removal of Resorcinol product from product profile in tabular form and Addendum to changes made in EIA report due to removal of Resorcinol as product.
- 3. Revised EMP with mentioning adequate auto control cost for critical process and fire hydrant network and fire extinguisher cost in EMP.
- 4. Revised air matrix with adequate fuel consumption details considering capacity of boiler and adequate stack height for it.
- Adequate details of risk assessment for Hazardous chemicals storage and its safety measures with superimposition of dispersion model for it on proposed project area and its impact on surrounding habitat and its mitigation measures for proposed project.
- 6. Readdress specific ToR for renewable energy adoption for proposed project instead of general details of it.
- Membership certificate of Common spray dryer for effluent disposal like booked load quantity in KL/Day, spare capacity, Consented capacity etc and TSDF site membership certificate for Hazardous Waste disposal.
- PP submitted their reply for the query raised by SEAC during SEAC meeting dated 17.06.2021 through email.
- The proposal was reconsidered in the SEAC video conference meeting dated **05.08.2021**.
- Revised Salient features of the project including Water, Air and Hazardous waste management are as under:

Particulars	Particulars						
Total cost of P	Total cost of Proposed Project						
(Rs. in Crores)							
	Total Project Cost						
	4.75 Crores						
-	Particulars Total cost of P (Rs. in Crores)	Particulars Total cost of Proposed Project (Rs. in Crores): Total Project Cost 4.75 Crores	Particulars Total cost of Proposed Project (Rs. in Crores): Total Project Cost 4.75 Crores				

		De	etails	Project Co	st	
			Ind	(Rs. In Cro	ores)	
		La	uilding	2		
		Ma	achinerv	1.56		
		Ot	her	0.19		
		Тс	otal	4.75		
\-2	Details of	Environmental M	anagement	Plan (EMP)	As b	elow:
Sr	Unit	Detail	Capital	Operating	Maintenance	Total
No		Dotaii	Cost (Rs. In	Cost	Cost	Recurring Cost
			Lakh)	(Rs. In Lakh)	(Rs. In Lakh)	(Rs. In Lakh)
1	Waste Water	ETP	15	1	1	2
2	Air	APCM	18	2	2	4
3	Noise Pollution Control	Enclosures	1	0.5	0.5	1
4	Rain Water Harvesting	Percolation wel	1 2	0.5	0.5	1
5	AWH Monitoring	Laboratory	1	0.5	0.5	1
6	Fire & Safety	Fire Hydrant and Maintanance	12	2	2	4
7	Green Belt Development	Plant	1	0.5	0.5	1
8	Occupational Health	Medical Checkup	1	0.5	0.5	1
9	Process Control	Integrated DCS (Distributed Control System	5 10)	1.0	1.0	2
10	CER		9.5	-	-	-
	Tota	al	70.5	8.5	8.5	17
Sumn	nary					1
	Cost of Proj EMP Capita Percentage	<u>ect in Crores per</u> Il Cost in Crores p :	Annum: per Annum a	4.75 and 0.705	(14.84 %)	
	EMP Recur and Percen	ring Cost in Crore tage:	es per Annu	m 0.17 (3.58 %)	
4-3	Details of	CER as per OM (dated 01/05	/2018		
. •				Do in Cr	oroo	
		% as pe	er the Olvi	RS. IN CI	ores	

Brief r	note d	on proposed activities	s for CER:							
	Pla	et (Rs)								
Sr.	C	ER as per specific	1 st year 2 nd yea		3 rd year	4 th year	5 th year			
NO.		villages	(2021)	(2022)	(2023)	(2024)	(2025)	Total		
1	Gre Dev tree Villa Bila	en Belt relopment (1000 rs) age: siya, Enasan	100,000	100,000	100,000	100,000	100,000	500,000		
2	Ra Villa	in Water Harvesting at 4 Nos. of units age: Bilasiya, Enasan	100,000	110,000	120,000	120,000	-	450,000		
		TOTAL	200,000	210,000	220,000	220,000	100,000	950,000		
B-1		Plot area	Total Plot area							
			125	7 Sq. m.						
B-2		Brief note on Area adequacy in line to proposed project activities:								
B-3		Green belt area	Area in Sq	. meter	To (Sq. 1	Total (Sq. meter) 420				
In case exact lo		In case of GREEN- exact location (Lat-	% of total a BELT partl _ong), Agre	s.41 give comp ecific area	lete details etc.	s like				
С	C Employment genera			Tc 2	otal 5					
		In case of Indirect e	mploymen	t, Give det	tails.					
D		WATER								
D-1 Source of Water Supply										

	(GIDC, Bore well, Surface water, Tanker supply etc) GIDC Naroda								
S	 Status of permission from the concern authority. GIDC is supplying once obtaining GPCB CTE, CC&A. 								
D-2 V	Water consumption (KLD)								
	Category	Quantity KLD	Remarks						
	(A) Domestic	2.5	2.5 KLD fresh						
	(B) Gardening	0.5	0.5 KLD fresh						
	(C) Industrial								
	Process	86	36 KL fresh + 50 KL recycle						
	Washing	12	12 KL fresh						
	Boiler	5	5 KL fresh						
	Cooling	24	9 KL fresh +						
	Coomig		15 KL recvcle						
	Others (Scrubber)	3	3 KL fresh						
	Industrial Total	130	-						
	Total (A + B + C)	133	-						
		100							
V	Waste water generation (KLD)								
		Quantity KLD	Remarks						
	(A) Domestic	2	TOSIP						
	(B) Gardening	0	-						
	(C) Industrial	00							
	Process	80							
	vashing	12							
	Boller	1							
		2							
	Others (Scrubber)	2	IOEIP-1						
		97	-						
	I otal $(A + B + C)$	99	-						
Brief Note on Tota Domestic + scrubber wil KLD R.O. p common Sp washing and of 2.0 KLD w	worst case scenario for waste water al effluent generation from propose 97 KLD of Industrial). 82KLD w I be treated in primary ETP-1 and bermeates will be recycled. 50 KLI ray Drying Facility, Naroda and 15 k I cooling will be treated in ETP-2 and will be treated in STP and used for gr	r generation(Qualitative a ed facility will be 99 KL astewater generation fr will pass through the R D R.O. rejected will be KLD. Wastewater genera d will be recycled. Domestic eenbelt development.	and Quantitative): D (2.0 KLD of rom process & .O. System. 32 discharged to ted from Boiler, stic Wastewater						
or no high co	ncentration effluent generation from	proposed project (Which	ever is applicable).						
D-4 M	ode of Disposal & Final meeting poir	it							
-									
Domestic:	Green belt								
Industrial:	Common Spray Drying Facility, Na	iroda.							
	, , , , , , , , , , , , , , , , , , ,								

Clearly mention about final disposal

D-5 Treatment facilities

For Domestic waste water:

Capacity of STP: 2 KLD

For Industrial waste water: Treatment facility within premises with capacity [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc. Treatment scheme including segregation at source. (Give Characteristics of each stream i.e. COD, BOD, TDS etc.) In case of stream segregation, Separate ETP (ETP-1, ETP-2....) for each stream shall be proposed.

➤ Total effluent generation from proposed facility will be 99 KLD (2.0 KLD of Domestic + 97 KLD of Industrial). 82KLD wastewater generation from process & scrubber will be treated in primary ETP-1 and will pass through the R.O. System. 32 KLD R.O. permeates will be Recycled. 50 KLD R.O. rejected will be discharged to common Spray Drying Facility, Naroda and 15 KLD. Wastewater generated from Boiler, washing and cooling will be treated in ETP-2 and will be recycled. Domestic Wastewater of 2.0 KLD will be treated in STP and recycled for green belt development.

		Conce	Diluted stream			
Details	Inlet	Primary	Treated	RO	Inlet	Primary
	to	treated	RO	concentrated	to	treated
	ETP-	to RO	to RO permeate to MEE		ETP-	to
	1	system	to reuse		2	Reuse
Flow in	82	82	32	50	15	15
KL/day						
рН	5.5	7.5	7.9	7.0	8.0	7.5
COD in mg/l	13200	7800	640	12200	450	260
BOD in mg/l	2730	1500	81	2400	51	27
TDS in mg/l	21500	20100	2450	31400	2450	2280
SS in mg/l	140	80	35	110	50	10
Oil & Grease	2	0	0	0	1	0
iiig/i						

Note: (In case of CETP discharge) :

Management of waste water keeping in view direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP.

			Concent	Diluted	stream		
Detai	ls	Inlet to ETP- 1	Primary treated to RO system	Treated RO permeate to reuse	RO concentra ted to MEE	Inlet to ETP- 2	Primar y treated to Reuse
Flow KL/da	Flow in 82 82 KL/day		32	50	15	15	
pH		5.5	7.5	7.9	7.0	8.0	7.5
COD mg/l	in	13200	7800	640	12200	450	260
BOD mg/l	in	2730	1500	81	2400	51	27
TDS i	in	21500	20100	2450	31400	2450	2280



	1	Bo TF HA SF	iler FH AG FD	Natural C	Sas 79	00 – 85 kcal/kg	00	4 Hrs.	775 SCM/Day
E-2		Flue g No. of MT/hr, (In cas mecha	as emissio Boilers/TI KVA etc. se of Proje anism pub	on details FH/Furnac ect located lished in t	ces/DG s d within C he MOE	ets etc. CPA/SP/ FCC's C	with c A,AP M vide	apacities viz. CM shall be ir e dated 31.10	TPH, Kcal/hr, I line to the .2019)
	Sr. 1	No. S	Source of emission with capacity	Stack height (m)	Type of fuel	of Qu of (M [*]	iantity Fuel T/day)	Type of emission i.e. Air Pollutants	Air Pollution Control Measures (APCM)
	1.	(0 2 (0	Thermic Fluid Heater 1 Nos. of Lacs Cal) Dne stand by)	20	Natura Gas	al (47:	5SCM/ day)	/ PM/SO ₂ / NOx	Adequate Stack Height
	2.	Н	AG / SFD (No – 1)	20				PM/SO ₂ / NOx	Adequate Stack Height
	3.		D.G set 125KVA Standby) (No-1)	4	Diese	1 (25	Lit/hr)	PM/SO ₂ / NOx	Adequate Stack Height
	4.	0	Boiler .614 Ton (Nos-3)	20	Natura Gas	al (SCI	300 M/day)	PM/SO ₂ / NOx	Adequate Stack Height
E-3		Process	s gas i.e. ⁻	Type of po	ollutant g	ases (S	O _{2,} HC	CI, NH _{3,} CI _{2,} NC	9 _x etc.)
	Sr	. No.	Specif source emissio	ic (N of the on & p	ame of product rocess)	Typ emis	e of sion	stack/vent height (m)	Air pollution Control Measures (APCM)
		1	Reaction vessel	Mar on Sulp -A np (Res Ma	nufacturi ng of phonatio roducts sist Salt, etanilic	S(& S	D ₂ SO ₃	20	2 stage Scrubber- A (1 water & Alkali Scrubber)
		2	Reactio vessel -	Acio Ani On Dis B (A Ani	d Liquid, line 2:5 sulfonic Acid DSA), line 2:4	S(& S	D ₂ SO ₃	20	2 stage Scrubber- B (1 water & Alkali Scrubber)
		3	Reactio vessel -	on · C (A	Sulfonic Acid .DSA),	S(& S	D ₂ 5O ₃	20	2 stage Scrubber- C (1 water

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			Metanilic Acid			& Alkali Scrubber)
	4	Evaporatio n	Powder) Process to remove moisture	SO ₂ / NOx/PM	A 20	Adequate Stack Height
	5	SFD	Drying of product	SO ₂ / NOx/PM	A 20	Bag Filter
Note:	Details of g There shal Estimation Gaseous e which will b Requireme wise and T 3 KLD scru Yearly gen sound mar All bleed lid Fugitiv Hazar (As pe Mover Note:	paseous raw m I no use of any of process ga mission due to be scrubbed by nt of the scrub otal) abbing media w eration of all b bagement in H quors (MT/KL /e emission de dous waste er the Hazardo ment) Rules 20 Priorities for Reuse/Recy permission, Quantificatio calculations Disposal to s	naterials used y gaseous raw s emission (P the Sulphona y alkali media bbing media (P will be required leed liquors (P W matrix. per Annum) as etails with its n bus and Other D16. HW Managem cle within pren TSDF/CHWIH n of hazardou shall be incorp scrap vendors/ nanagement m	in proposed materials. roduct wise ation process to achieve to KL per Day) d. MT/KL per A <u>s mentioned</u> nitigation me Wastes (Ma nent: Pre-pr nises, Sell o s waste sha porated in E <u>vendors/trana</u> natrix	d project and Total) ss generation the emission considering Annum) as m <u>d in HW matr</u> easures. anagement a cocessing, Co but to actual u all be based of MP details si iders is not al	n Dioxides of sulfure norms. solubility (Product entioned above and ix nd Transboundary o-Processing, users having Rule-9 on mass balance and eparately. llowed
	: Type/N b. of Hazard wast	ame Spu Sou lous gene e (Na the A	ecific Ca rce of eration Sc me of a Activity,	ategory and hedule is per HW	Quantity (MT/Annu m)	Management of HW
		e	etc.)	cules.		
1	. ETP Slu	udge E	TP Ca	ategory o.34.3	1080	Collection, storage, transportation, disposal at the approved TSDF site

	3.	Iron Sludg	Produ Metalli MAP	ction of ic Acid,	Ca No	ntegory 5. 26.1	6553	3	Collec Stora Transpo Disposa cement fa	ction, age, ortation, al to the actory for essing
	4.	Spent Sulphurio Acid	Produc Aniline 2:4,2:5 c Disulp Acid	ction of 5 honic	Ca No Sch	tegory D2 of edule-II	4128	3	Collec stora transpo sold to (Industry to Vendo rule	ction, age, rtation, Cement or Send ors under e-9
	5.	Inorganic S KCI	A Produce MAP Salt	ction of			310		Collec Stora Transpor entire qua sell to act under F	ction, age, rtation & antity will tual user Rule 9.
	6.	Sodium Bisulphite	e Scru	ıbber	D2 c	of Sch=II	390		Collec Stora Transpor entire qua be utili process o actual us Rule	ction, age, rtation & antity will zed in or sell to er under e 9.
	8.	Discarde Containe	d R er Mate	aw erials	Ca No	ntegory 5. 33.3	50		Collec storage, within pr or se regist recyc	ction, , Reuse remises ell to tered cler.
	9	Used Oi	I DG Ope	set ration	Ca N	ntegory o. 5.1	0.1		Collec storage, within pr or se register refir	ction, , Reuse remises ell to red re- ner.
F-	·2 etails c	Members (For HW) of Membersh	ship details manageme ip letter no.	of TSDF, ent) & Date w	CHV	VIF etc.	city of the	e Con	nmon Faci	lity.
F-	<u>}</u> ∙3	Details o (MSW a	of Non-Haza nd others)	rdous wa	ste 8	k its dispo	sal	Nor was	n Hazardo ste will be	us recycling sold to the
		Sr. Tyno. of	ype/Name f Other rastes	Specific Source of generation (Name of the Active Product etc.)	of on of vity,	Quar (MT/Ar	ntity num)	Mana of W	agement	
		1 P	aper & lastic	Office w	ork	1.0		Sold user	to actual	

G	Solvent management, VOC emissions etc.						
G-1	Brief Note on types of solvents, Details of Solvent recovery, % recovery, reuse						
	of recovered Solvents etc.						
> N	lot Applicable						
G-2	Brief Note on LDAR proposed:						
\checkmark							
G-3	VOC emission sources and its mitigation measures						
> N	lot Applicable						
Н	SAFETY details						
H-1	Details regarding storage of Hazardous chemicals						
	(For tank storages only including spent acid and spent solvent tanks)						
-							
Srno	Name of Chamical Connective of Number of Hezerdous						

Sr.no	Name of Chemical	Capacity of Tank	Number of Tanks	Hazardous Characteristics of Chemical
1	Sulphuric Acid	20 KL	2	Toxic
2	Oleum	30 KL	1	Toxic
3	HCI	20 KL		Toxic
4	Nitro benzene	20 KL	1	Toxic
5	Spent Acid	20 KL	2	Toxic
6	Imergency Tank	20 KL	2	-
	Total		9	

Brief note on storage of Hazardous chemicals in Tanks

- > All chemicals storage tank keep in a separate tank.
- Spare storage tank will keep for Oleum.

Brief note on storage of Hazardous chemicals other than Tanks i.e. Drum, Barrels, Carboys, Bags etc.

- Safety Measures for Drum Storage area:
- Some chemicals will be received at plant in drums by road truck and stored in a separate drum storage area.
- > FLP type light fittings will be provided.
- > Proper ventilation will be provided in go down.
- > Proper label and identification board /stickers will be provided in the storage area.
- Conductive drum pallets will be provided.) Drum handling trolley / stackers/fork lift will be used for drum handling. Separate dispensing room with local exhaust and static earthing provision will be made.
- Materials will be stored as per its compatibility study and separate area will be made for flammable, corrosive and toxic chemical drums storage.
- Smoking and other spark, flame generating item will be banned from the Gate.

Safety details of Hazardous Chemicals:

 Safety measures for Acid storage Tank: Storage tank will be stored away from the process plant. Tanker unloading procedure will be prepared and implemented. Caution note and emergency handling procedure will be displayed at unloading area and trained all operators. NFPA label will be provided. 	Type of Hazardous Chemicals	Safety measures
		 Safety measures for Acid storage Tank: Storage tank will be stored away from the process plant. Tanker unloading procedure will be prepared and implemented. Caution note and emergency handling procedure will be displayed at unloading area and trained all operators. NFPA label will be provided.

	•	Required PPEs like full body pro- gumboot, Respiratory mask etc. Neutralizing agent will be kept r spillage. Safety shower, eye wash with q acid storage area. Material will be handled in close will be provided to all storage ta provision. Double drain valve will provided Level gauge will be provided on Safety permit for loading unload prepared and implemented. TR transporters and will be trained Hazardous chemicals. Fire hydrant system with jockey	otection PVC apron, Ha will be provided to oper ready for tackle any emer quenching unit will be provided anks, collection pit with with all storage tanks. Sing of hazardous mater EM CARD will be provid for transportation Emer of pump as per TAC norr	and gloves, erator. ergency rovided in Dyke wall valve rial will be ded to all gency of ns will be
		installed.		
> Арр	licability of	PESO: Not Applicable		
H-2	Types of h	azardous Processes involved and	d its safety measures:	wothormio
	Reaction e	ation process, Nitration process,	Chionnation process, E	xounennic
-	Troublion o			
Type of	Safety	measures including Automation		
Process		-		
Sulphonati	io Provisi	on of Safety valve & rapture disc	on reactor.	
n	• Pro	vision of auto dumping vessel.		
	• Re	quired PPEs like full body protect	tion PVC apron, Hand g	loves,
	gur No	utralizing agent will be kent read	be provided to operator	r. Dov spillage
	• Sa	fety Shower and eve wash will be	novided near process	area
	Ca	ution note and emergency first ai	d will be displayed and	train for the
	sar	ne to all employees.		
	• Firs	st Aid Boxes will be available in p	rocess area.	
	• Em	ergency organization and team v	vill be prepared as per (On site-Off
	site	emergency planning.		
	● Em	lergency team will be prepared a	nd trained for scenario b	base
	em	ergency. Like I oxic control team,	, ⊢ire control team, First	t aid team,
	cor	innunication and general adminis	r anillad matarial unless	eann etc.
	• D0	not touch damaged containers o	r spilled material unless	wearing
	• lle	e water spray to reduce vapors. c	o not put water directly	on leak
	spi	Il area or inside container. Keep o	combustibles (wood. na	per, oil. etc.)
	aw	ay from spilled material.	·····, po	, ,, ,
	• Co	ver with DRY earth, DRY sand or	other non-combustible	material
	foll	owed with plastic sheet to minimi	ze spreading or contact	with rain.
	•			
H-3	Details of I	Fire Load Calculation		
	Total Plo	ot Area:	1257	_
	Area util	ized for plant activity:	57	
	711004 0101			_
	Area util	ized for Hazardous Chemicals	120	1

	Number of Floors:	G+2	
	Water requirement for firefighting in KLD :	50 KL	
	Water storage tank provided for firefighting KLD:	in 100 KL	_
	Details of Hydrant Pumps:	3 nos.	
	Nearest Fire Station :	NarodaFire Station	
	Applicability of Off Site Emergency Plan:	Yes	
-			
H-4	Details of Fire NOC/Certificate:		
H-4	Details of Fire NOC/Certificate:		
H-4 H-5	Details of Fire NOC/Certificate: Details of Occupational Health Centre (OHC):	
H-4 H-5 -	Details of Fire NOC/Certificate: Details of Occupational Health Centre (OHC):	
<u>H-4</u> H-5 -	Details of Fire NOC/Certificate: Details of Occupational Health Centre (OHC Number of permanent Employee :): 25	
H-4 H-5 -	Details of Fire NOC/Certificate: Details of Occupational Health Centre (OHC Number of permanent Employee : Number of Contractual person/Labour :): 25 10	
<u>H-4</u> H-5 -	Details of Fire NOC/Certificate: Details of Occupational Health Centre (OHC Number of permanent Employee : Number of Contractual person/Labour : Area provided for OHC:): 25 10 50	
H-4 H-5 -	Details of Fire NOC/Certificate: Details of Occupational Health Centre (OHC Number of permanent Employee : Number of Contractual person/Labour : Area provided for OHC: Number of First Aid Boxes :): 25 10 50 5	
H-4 H-5 -	Details of Fire NOC/Certificate: Details of Occupational Health Centre (OHC Number of permanent Employee : Number of Contractual person/Labour : Area provided for OHC: Number of First Aid Boxes : Nearest General Hospital :): 25 10 50 5 NIA Charitable Hospital Naroda GIDC	

- During meeting, Committee noted that PP has addressed revised layout plan with area adequacy, product profile, Details regarding changes in Water, Air, Hazardous waste and EMP before removal of Resorcinol product and after removal of Resorcinol product from product profile in tabular form and Addendum to changes made in EIA report due to removal of Resorcinol as product, revised EMP, revised air matrix, risk assessment for Hazardous chemicals storage and its safety measures with superimposition of dispersion model for it on proposed project area, specific ToR for renewable energy adoption for proposed project and membership certificate of common facility.
- Looking to presentation submitted by technical expert of PP is found still inadequate for details of oleum storage and its risk assessment for various Hazardous chemicals and still addendum to EIA report in tabular form not presented after removal of Resorcinol as product, Committee asked to submit (1)) Details in tabular form regarding Addendum to changes made in EIA report due to removal of Resorcinol as product along with mentioning page in which changes made by PP (2) adequate details of risk assessment for Hazardous chemicals like oleum storage and its safety measures with superimposition of dispersion model for it on proposed project area and its impact on surrounding habitat and its mitigation measures for proposed project considering worst case scenario of oleum storage and any leakage and blast in handling and storage tank for oleum with details of population affected in nearby residential habitat of GIDC Naroda area in place of general details of oleum and other hazardous chemical risk assessment

After detailed discussion, Committee unanimously decided to consider the project in one of upcoming meeting after submission of following documents:

1. Details in tabular form regarding Addendum to changes made in EIA report due to removal of

Resorcinol as product along with mentioning page in which changes made by PP.

2. Adequate details of risk assessment for Hazardous chemicals like oleum storage and its safety measures with superimposition of dispersion model for it on proposed project area and its impact on surrounding habitat and its mitigation measures for proposed project considering worst case scenario of 30 KL of oleum storage and any leakage and blast in handling and storage tank for 30 KL oleum with details of population affected in nearby residential habitat of GIDC Naroda area, in place of general details of oleum and other hazardous chemical risk assessment and safety.

10.	SIA/GJ/IND2/206185/2021	VGJ/IND2/206185/2021 M/s. Nishal Enterprises Pvt. Ltd.					
		Survey/Block No. 167 (Old Survey/Block No. 110), Village: Vav, Tal: Vagra, Dist: Bharuch-392165.					

Category of the unit: 5(f)

Project status: New

- Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/206185/2021 on dated 22/02/2021 for obtaining Environmental Clearance.
- Project proponent has submitted <u>Form 1, Pre-Feasibility Report & Environment Management Plan as per</u> <u>Notification issued by MoEF&CC vide S.O. 1223(E) dated 27th March, 2020 regarding consideration of proposals or activities in respect of Active Pharmaceuticals Ingredients (API) as B2 category.
 </u>
- This is a new unit proposed for manufacturing of synthetic organic chemicals [API and Its Intermediates] as below,

Sr. No.	NAME OF PRODUCT	API Or Intermediate	Cas No.	Quantity MT/Mont h	Said API is used for/End Use of said API
1.	2,2',4'-Trichloro Acetophenone	Intermediate	4252-78-2		Miconazole Nitrate/treat vaginal yeast infections
2.	Mefenamic Acid	API	61-68-7		API/relieve mild to moderate pain
3.	Amoxicillin Trihydrate	API	61336-70-7	100	API/treat many different types of infection caused by bacteria
4.	3-(dimethylamino)-1-(3- methoxyphenyl)-2-methylpropan-1- one	Intermediate	197145-37- 2	MT/Mont h	Tapentadol/ treat moderate to severe acute pain
5.	1-(hydroxycyclohexyl)(4- methoxyphenyl)-acetonitrile	Intermediate	93413-76-4		Venlafaxine/to treat depression
6.	2-dimethylaminomethyl cyclohexanone HCI	Intermediate	42036-65-7		Tramadol/to relieve moderate to moderately severe pain.

7.	Acetic acid 2-[4-(4-chloro-butyryl)-	Intermediate	169032-11- 5	
8.	4-Chloro-1-[4-(2-hydroxy-1,1-	Intermediate	169280-25-	Fexofenadine/relieve the
9.	2-[4-(4-Chloro-butyryl)-phenyl]-2- methyl-propionic acid	Intermediate	169280-21- 1	symptoms
10.	Methyl-2-[4-(4-chlorobutanoyl) phenyl]-2-methylpropanoate	Intermediate	154477-54- 0	
11.	Fexofenadine hydrochloride	API	153439-40- 8	API/to relieve allergy symptoms
12.	2-(4-{4-[4-(Hydroxy-diphenyl- methyl)- piperidin-1-yl]-butyryl}- phenyl)-2- methyl-propionic acid methyl ester	Intermediate	154477-55- 1	Fexofenadine
13.	2-(4-{1-Hydroxy-4-[4-(hydroxy- diphenyl-methyl)-piperidin-1-yl]- butyl}-phenyl)-2-methyl-propionic acid	Intermediate	138452-21- 8	allergy symptoms
14.	2, 3,4, 5-Bis-O-(1- MethylEthylidene)-B-D-fructo pyranose	Intermediate	20880-92-6	Topiramate/treat epilepsy
15.	Lumefantrine	API	82186-77-4	API/treat non-severe malaria.
16.	2-choloro-1-(2,7-dichloro-9H- fluoren-4-yl)ethan-1-one	Intermediate	131023-37- 5	
17.	2-chloro-1-(2,7-dichloro-9H- fluoren-4-yl)ethane-1-ol	Intermediate	1374644- 82-2	Lumefantrine/treat non- severe malaria
18.	2-(dibutylamino)-1-(2,7- dichloro - 9H-fluoren-4-yl)ethanol	Intermediate	53221-07-1	
19.	Dapoxetine	API	119356-77- 3	API/treatment of premature ejaculation
20.	3-chloro-1-phenyl propan-1-ol	Intermediate	18776-12-0	Dapoxetine/treatment
21.	Hydroxyl Naphthyl Ether	Intermediate	93-20-9	of premature ejaculation
22.	2-methoxybenzoic acid	Intermediate	579-75-9	Lamotrigine/prevent and control seizures.
23.	3-chloro-N-(3- hydroxyphenyl)propanamide	Intermediate	50297-40-0	Acetaminophen/treat mild to moderate pain
24.	3-chloro-N-(4- hydroxyphenyl)propanamide	Intermediate	19314-10-4	Acetaminophen/treat mild to moderate pain
25.	7-Hydroxy-3,4-dihydroquinolin- 2(1H)-one	Intermediate	22246-18-0	Aripiprazole/ treat certain mental/mood disorders
26.	6-Hydroxy-3,4-dihydroquinolin- 2(1H)-one	Intermediate	54197-66-9	Cilostazol/improve the symptoms of a certain blood flow problem in the legs
27.	Azithromycin dihydrate	API	117772-70- 0	API/treat a wide variety of bacterial infections
28.	Bupropion Hydrochloride	API	31677-93-7	API/treat major depressive disorder and seasonal affective disorder.

29.	3-Bromo-1-(3-chloro-phenyl) - propan-1-one	Intermediate	500011-86- 9
30.	Bupropion	Intermediate	34841-39-9
31.	Carisoprodol	API	78-44-4
32.	5-Methyl-5-propyl-[1,3]dioxan-2- one	Intermediate	7148-50-7
33.	Isopropyl-carbamic acid 2- hydroxymethyl -2-methyl-pentyl ester	Intermediate	25462-17-3
34.	Cinacalcet Hydrochloride	API	364782-34- 3
35.	Methanesulfonic acid 3-(3-trifluoro methyl-phenyl)-propyl ester	Intermediate	21172-43-0
36.	(1-Naphthalen-1-yl-ethyl)-[3-(3- trifluoromethyl-phenyl)-propyl]- amine	Intermediate	1271930- 12-1
37.	Clopidogrel Bisulphate	API	120202-66- 6
38.	2-(thiophen-2-yl)ethanol	Intermediate	5402-55-1
39.	2-(Thiophen-2-yl)ethyl 4- methylbenzenesulfonate	Intermediate	40412-06-4
40.	(S)-Methyl 2-(2-chlorophenyl)- 2- ((2-(thiophen-2- yl)ethyl)amino)acetate hydrochloride	Intermediate	141109-19- 5
41.	(S)-Methyl 2-(2-chlorophenyl)-2- (6,7- dihydrothieno [3,2-c]pyridin- 5(4H)-yl)acetate sulfate	Intermediate	120202-71- 3
42.	Fluconazole	API	86386-73-4
43.	(2,4-Difluoro-2-(1h- 1,2,4-Triazole- 1-YI) Acetophenone)	Intermediate	86404-63-9
44.	1-[2-(2,4-di fluorophenyl)-2,3- epoxypropyl]-1H-1,2,4-Triazole	Intermediate	86386-76-7
45.	Ketoconazole	API	65277-42-1
46.	Cis –Bromo benzoate	Intermediate	61397-56-6
47.	Cis-Imidazolealcoho	Intermediate	506-43-4
48.	Cis –Tosylate	Intermediate	154003-23- 3
49.	1-Acetyl-4-(4-hydroxy phenyl)piperazine	Intermediate	67914-60-7
50.	Levocetirizine Dihydrochloride	API	130018-77- 8
51.	1-Methanesulfonyl-4- methylbenzene,(2-chloro-ethyl)- chloromethylamine	Intermediate	1671-18-7

Bupropion
Hydrochloride/treat
major depressive
disorder and seasonal
affective disorder.
API/treat muscle pain
and discomfort.
Carisoprodol/ treat
muscle pain and
discontion.
ADI/ treat accordan/
hyperparathyraidiam
nyperparatityroidisin
Cinacalcet
Hydrochloride/treat
secondary
hyperparathyroidism
API/treat new/worsening
chest pain
ulest pall
Clopidogrel Bisulphate/
treat new/worsening
chest pain
API/prevent and treat a
variety of fundal and
veast infections
Fluconazole/ prevent
and treat a variety of
fundal and veset
infections
ADI/ treat sorious
AFI/ IIEdi Sellous
a: bloctomycocic
g: Diastomycosis
ketoconazole/ treat
serious
tungal intections includin
g: blastomycosis
API/relieve allergy
symptoms
Levocetrizine
Levocethzine
Dihydrochloride/relieve

52.	1-[(4-Chloro-phenyl)-phenyl- methyl]-4- (toluene-4-sulfonyl)- piperazine	Intermediate	163837-56- 7	
53.	1-[(4-Chloro-phenyl)-phenyl - methyl]-piperazine	Intermediate	38212-33-8	
54.	1-{4-[(4-Chloro-phenyl)-phenyl - methyl]-piperazin-1-yl}-ethanol	Intermediate	109806-71- 5	
55.	Memantine HCI	API	41100-52-1	API/treat moderate to severe confusion
56.	N-(3,5 dimethyladamantan-1- yl)urea	Intermediate	19982-07-1	Memantine HCI/ treat moderate to severe
57.	(3,5, dimethyladamantan-1-amine)	Intermediate	41100-52-1	confusion
58.	Quetiapine Fumarate	API	111974-69- 7	API/treat certain mental/mood conditions
59.	11-Piperazin-1-yl-dibenzo[b,f] [1,4]thiazepine	Intermediate	111974-74- 4	Quetiapine
60.	2-[2-(4-Dibenzo[b,f][1,4]thiazepin- 11-yl -piperazin-1-yl)-ethoxy]- ethanol	Intermediate	1076199- 40-0	mental/mood conditions
61.	Simvastatin	API	79902-63-9	API/lower cholesterol
62.	2-Methyl-butyric acid 8-(6- butylcarbamoyl-3,5- dihydroxy- hexyl)-3,7-dimethyl- 1,2,3,7,8,8ahexahydro- naphthalen-1-yl ester	Intermediate	863239-60- 5	
63.	2-Methyl-butyric acid 8-[6- butylcarbamoyl-3,5-bis-(tert- butyldimethyl- silanyloxy)-hexyl]- 3,7-dimethyl-1,2,3,7,8,8a- hexahydronaphthalen- 1-yl ester	Intermediate	239-10-5	Simvastatin/lower cholesterol
64.	2,2-Dimethyl-butyric acid 8-[6- butylcarbamoyl-3,5-bis-(tert- butyldimethyl- silanyloxy)-hexyl]- 3,7-dimethyl-1,2,3,7,8,8a- hexahydronaphthalen- 1-yl est	Intermediate	97369-75-0	
65.	Simvastatin Amide	Intermediate	1002347- 71-8	
66.	Telmisartan	API	144701-48- 4	API/treat high blood pressure (hypertension)
67.	methyl-4-methyl-1,1-biphenyl- 2- carboxylate	Intermediate	49742-56-5	
68.	4-(bromomethyl)biphenyl-2- carboxylic acid methyl ester	Intermediate	114772-38- 2	
69.	methyl 4'-((1,7'-dimethyl-2'-propyl- 1H,3'H-[2,5'- bibenzo[d]imidazol]- 3'-yl)methyl)-[1,1'-biphenyl]-2- carboxylate	Intermediate	1026353- 20-7	Telmisartan/treat high blood pressure (hypertension)
70.	4'-((1,7'-dimethyl-2'-propyl-1H,3'H- [2,5'- bibenzo[d]imidazol]-3'- yl)methyl)-[1,1'-biphenyl]-2- carboxylic acid	Intermediate	144702-26- 1	
71.	Ziprasidone Hydrochloride	API	138982-67- 9	API/ treat schizophrenia

72.	6-Chloro-5-(2-chloro-ethyl)- 1,3- dihydro-2Hindol-2-one	Intermediate	118289-55- 7	
73.	3-Piperazin-1-yl-1,2- benzisothiozole hydrochloride	Intermediate	87691-87-0	
74.	Ziprasidone	Intermediate	146939-27- 7	
75.	Carvedilol	API	72956-09-3	
76.	1,3cyclohexandione mono phenyl hydrazone	Intermediate	27385-45-1	
77	1.2.3 4-tetrahydrocarbazol-4-one	Intermediate	15128-52-6	
78	4-hydroxy-9-(H) carbazole	Intermediate	52602-39-8	
79.	4-oxyranylmethoxy-9-(H)- carbazole	Intermediate	51997-51-4	
80.	Omeprazole	API	73590-58-6	
81.	3,5-Dimethyl-4-nitro-pyridine N- oxide	Intermediate	14248-66-9	
82.	(4-methoxy-3,5-dimethylpyridin-2- yl)methanol	Intermediate	86604-78-6	
83.	2-(chloromethyl)-4-methyoxy-3,5- dimethylpyridine	Intermediate	86604-75-3	
84.	5-Methoxy-2-(4-methoxy-3,5- dimethyl-pyridine-2- ylmethylsulfanyl)-1H- benzoimidazole	Intermediate	73590-85-9	
85.	Lansoprazole	API	103577-45- 3	
86.	4-nitro-2,3-dimethyl pyridine-N- oxide	Intermediate	37699-43-7	
87.	2-Hydroxy methyl-3-methyl pyridine hydrochloride	Intermediate	11817-10-3	
88.	2-chloromethyl-3-methyl pyridine hydrochloride	Intermediate	153259-31- 5	
89.	2[4-(2,2,2-Tri fluoro ethoxy)-3- methyl pyridine]methyl thio-1H- Benzimidazole	Intermediate	127337-60- 4	
90.	Etoricoxib	API	202409-33- 4	
91.	1-(4-Methanesulfonyl-Phenyl)- ethanone	Intermediate	1020237- 77-7	
92.	(4-Methanesulfonyl-Phenyl)-acetic acid	Intermediate	90536-66-6	
93.	2-(4-Methanesulfonyl-Phenyl)-1-(6- methyl-pyridin-3-yl)-ethanone	Intermediate	221615-75- 4	
94.	(2-Chloro-3-dimethylamino- allylidene)-dimethyl-ammonium Salt of Phosphorus Hexafluoride	Intermediate	291756-76- 8	
95.	Lurasidone hydrochloride	API	367514-88- 3	

Ziprasidone Hydrochloride/ treat schizophrenia API/treat high blood pressure Carvedilol/treat high blood pressure API/ treat the symptoms of gastroesophageal reflux disease Omeprazole/ treat the symptoms of gastroesophageal reflux disease API/treat certain stomach and esophagus problems Lansoprazole /treat certain stomach and esophagus problems API/ reduce the pain and swelling Etoricoxib/ reduce the pain and swelling

API/treat certain mental/mood disorders

96.	Methanesulfonic acid 2-methane sulfonyloxymethyl-cyclohexyl methyl ester	Intermediate	75-75-2	Lurasidone hydrochloride /treat certain mental/mood disorders
97.	Irbesartan	API	138402-11- 6	API/treat high blood pressure
98.	2-Butyl-4-spirocyclopentane-2- imidazolin-5-one hydrochloride	Intermediate	151257-01- 1	
99.	4-Bromomethyl-2-cyanobiphenyl	Intermediate	114772-54- 2	Irbesartan/ treat high
100.	4'-(2-Butyl-4-oxo-1,3-diaza- spiro[4.4]non-1-en-3-ylmethyl)- biphenyl-2-carbonitrile	Intermediate	138401-24- 8	blood pressure
101.	Monetelucast Sodium	API	151767-02- 1	API/control and prevent symptoms caused by asthma
102.	1-(3-[2-(7-Chloro-quinolin-2-yl)- vinyl]-phenyl)-3-[2-(1-hydroxy-1- methyl-ethyl)-phenyl]-propane-1-ol	Intermediate	287930-77- 2	
103.	Methane sulfonic acid 1-(3-[2-(7- Chloro-quinolin-2-yl)-vinyl]-phenyl)- 3-[2-(1-hydroxy-1-methyl-ethyl)- phenyl]-propyl ester	Intermediate	75-92-3	Monetelucast Sodium/ control and prevent
104.	1-{1-(3-[2-(7-Chloro-quinolin-2-yl)- vinyl]-phenyl)-3-[2-(1-hydroxy-1- methyl-ethyl)-phenyl]- propylsulfanylmethyl}-cyclopropyl)- acetic acid	Intermediate	200804-28- 0	symptoms caused by asthma
105.	Montelukast Dicyclohexylamine	Intermediate	577953-88- 9	
106.	Folic acid	API	59-30-3	API/treat folic acid deficiency and certain types of anemia
107.	4-Nitro benzoyl Chloride	Intermediate	122-04-3	
108.	2-(4-Nitro benzoyl amino)pentanedionic	Intermediate	6758-40-3	Folic acid/treat folic acid
109.	2-(4-Aminobenzoyl amino)pentanedionic acid	Intermediate	4230-33-5	types of anemia
110.	1,1,3-Trichloro propane-2-one	Intermediate	96-18-4	
111.	Bisoprolol Fumarate	API	66722-44-9	API/treat high blood pressure (hypertension)
112.	(4-((2- isopropoxyethoxy)methyl)phenol)	Intermediate	177034-57- 0	
113.	(2-((4-((2- isopropoxyethoxy)methyl)phenoxy) methyl)oxirane)	Intermediate	621-87-4	Bisoprolol Fumarate /treat high blood
114.	(1-(4-((2- isopropoxyethoxy)methyl)phenoxy) -3-(isopropylamino)propan-2-ol)	Intermediate	1215342- 36-1	
115.	Erythromycin Stearate	API	643-22-1	API/to treat a wide variety of bacterial infections

116.	Cephalexin	API	15686-71-2	
117.	Sulbactum	API	69388-84-7	
118.	Prednisolone	API	53-03-2	
119.	Metformine HCI	API	1115-70-4	
120.	Gabapentin	API	60142-96-3	
121.	(1-aminomethyl-cyclohexyl)-acetic acid)	Intermediate	60175-04-4	
122.	Vitamin B6	API	58-56-0	
123.	Clavulanate potassium	API	61177-45-5	
124.	Carithromycin	API	81103-11-9	
125.	Ciprofloxacin Lactate	API	857213-31- 1	
126.	Artesunate	API	88495-63-0	
127.	Ofloxacin	API	82419-36-1	
128.	Levofloxacin	API	100986-85- 4	
129.	Tinidazole	API	19387-91-8	
130.	Ornidazole	API	16773-42-5	
131.	Meropenem	API	119478-56- 7	
132.	3-[5-Dimethylcarbamoyl-1-(4- nitrobenzyloxycarbonyl)- pyrrolidin3-ylsulfanyl]-6-(1-hydroxy- ethyl) -4-methyl-7-oxo-1-aza- bicyclo[3.2.0] hept-2-ene-2- carboxylic acid 4-nitro-benzyl ester	Intermediate	90776-58-2	
133.	Paracetamol	API	103-90-2	
134.	Ritonavir	API	155213-67- 5	
135.	(1-Benzyl-4-tert- butoxycarbonylamino-2-hydroxy-5- phenylpentyl)-carbamic acid thiazol-5-ylmethyl ester	Intermediate	144163-97- 3	
136.	Thioisobutyramide	Intermediate	563-83-7	
137.	1-(2-Isopropylthiazol-4-yl)-N- methyl methanamine	Intermediate	1185167- 55-8	

ADI/ tract contain					
API/ treat certain					
infections caused by					
bacteria					
API/treat certain					
infections caused by					
bacteria					
API/ treat conditions					
such as arthritis					
API/control high blood					
sugar					
API/prevent and control					
seizures					
Cabapontin/provent and					
API/ prevent or treat a					
certain nerve disorder					
API/treat many different					
infections					
API/treat a wide variety					
of bacterial infections.					
API/ treat serious					
infections					
API/treat malaria					
API/ treat a variety of					
hacterial infections					
ADI/tract a variaty of					
API/ITEAL a variety of					
API/treat trichomoniasis					
API/treat people who					
have certain types of					
vaginal					
API/ treat certain types					
of bacterial infections.					
Meropenem/ treat					
certain types of bacterial					
infections.					
API/treat aches and pain					
A li/treat acries and pain					
Immunodeficiency virus					
(HIV) INTECTION					
Ritonavir/ treat human					
immunodeficiency virus					
(HIV) infection					

138.	(S)-2-(3-((2-Isopropylthiazol-4- yl)methyl)-3-methylureido)-3- methylbutanoic acid	Intermediate	154212-61- 0	
139.	Diclofenac Sodium	API	15307-79-6	API/to relieve pain, tenderness, swelling, and stiffness caused by osteoarthritis
140.	Aspirin	API	50-78-2	API/ reduce fever and relieve mild to moderate pain from conditions such as muscle aches
141.	Carbidopa	API	28860-95-9	API/ treat the symptoms of Parkins on's disease or Parkinson- like symptoms
142.	Methyl Dopa Methyl Ester	Intermediate	18181-08-3	Carbidopa/ treat
143.	3 3-pentamethylene oxaziridine	Intermediate	1130-32-1	the symptoms of Parkins
144.	Carbidopa Methyl Ester	Intermediate	91431-01-5	on's disease or Parkinson
145.	Carbamazepine	API	298-46-4	API/treat trigeminal neuralgia
146.	Olmesartan	API	144689-63- 4	API/treat high blood pressure
147.	Acyclovir	API	59277-89-3	API/treatment of herpes simplex virus infections of the skin
148.	Diacetyl Guanine	Intermediate	3056-33-5	Acyclovir / treatment of
149.	Diacetyl acyclovir	Intermediate	75128-73-3	herpes simplex virus infections of the skin
150.	Lopinavir	API	192725-17- 0	API/ treat human immunodeficiency virus (HIV) infection
151.	Clindamycin Phosphate	API	24729-96-2	API/ treat acne
152.	Dexamethasone Sodium	API	2392-39-4	API/ treat conditions such as arthritis
153.	Rifampicin	API	13292-46-1	API/prevent and treat tuberculosis and other infections
154.	N-Methylene-t-butylamine	Intermediate	109-73-9	Rifampicin/ prevent and treat tuberculosis and other infections
155.	Valsartan	API	137862-53- 4	API/treat high blood pressure
156.	(Methyl N-valeryl-N-[(2- cyanobiphenyl-4-yl)methyl]-l- valinate)	Intermediate	482577-59- 3	Valsartan/ treat high blood pressure
157.	Fluconazole	API	86386-73-4	API/prevent and treat a variety of fungal and yeast infections.
158.	(2,4-Difluoro-2-(1h- 1,2,4-Triazole- 1-YI) Acetophenone)	Intermediate	86404-63-9	Fluconazole/ prevent and treat a variety of
159.	1-[2-(2,4-di fluorophenyl)-2,3- epoxypropyl]-1H-1,2,4-Triazole	Intermediate	86386-76	fungal and yeast infections.
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160.	Aripiprazole	API	129722-12- 9	API/ treat certain mental/mood disorders
161.	7-Hydroxy-3,4-dihydro-1Hquinolin- 2-one	Intermediate	205448-65- 3	
162.	7-(4-Chloro-butoxy)-3,4-dihydro- 1H-quinolin-2-one	Intermediate	129722-34- 5	Arininrazolo/ troat
163.	1-(2,3-Dichloro-phenyl)-piperazine Hydrchloride	Intermediate	119532-26- 2	certain mental/mood
164.	7-{4-[4-(2,3-Dichloro-phenyl)-piper azin-1-yl] -butoxy}-3,4-dihydro-1H-quinolin-2- one	Intermediate	129722-25- 4	
165.	Nebivolol Hydrochloride	API	152520-56- 4	API/ treat high blood pressure.
166.	6-Fluoro-2-oxiranyl-chroman	Intermediate	99199-90-3	
167.	2-Benzylamino-1-(6-fluoro- chroman -2-yl)-ethanol	Intermediate	13781-67-4	Nebivolol Hydrochloride/
168.	2-{Benzyl-[2-(6-fluoro-chroman-2- yl) -2-hydroxy-ethyl]-amino}-1 -(6- fluoro-chroman-2-yl)-ethanol	Intermediate	929-706-85- 4	pressure.
169.	Lopinavir	API	192725-17- 0	API/treat human immunodeficiency virus (HIV) infection.
170.	1-Imino-4-(N,N-dibenzylamino) 5- phenyl-3-oxo-pent-1-ene	Intermediate	156732-12- 6	
171.	(R,Z)-5-amino-2-(dibenzyl amino) - 1,6-diphenyl hex-4-en-3-one	Intermediate	156732-13- 7	Lopinavir/treat human immunodeficiency virus
172.	(2S, 3S, 5S)-2-Amino-3-hydroxy-5- (1-tetra hydro pyrmid-2-onyl)-3- methyl butanoyl) amino-1,6- diphenyl	Intermediate	116-63-2	(HIV) infection.
173.	Darunavir	API	206361-99- 1	API/treat human immunodeficiency virus
174.	N-[2R,3S)-3-Tert butoxycrbonyl amino- 2-hydroxy-4-phenyl butyl]- isobutylamine	Intermediate	302964-08- 5	Darunavir/treat human
175.	N-[(2R,3S)-3-Tert butoxycarbonylamino-2- hydroxy- 4-phenyl butyl]-isobutylamine	Intermediate	160232-08- 6	immunodeficiency virus
176.	Levetiracetam	API	102767-28- 2	API/ treat seizures (epilepsy).
177.	N-(1-Carbamyl propyl)-4-chloro butyramide	Intermediate	102767-31- 7	Levetiracetam/ treat seizures (epilepsy).
178.	Pregabalin	API	148553-50- 8	API/ treat neuropathic pain and fibromyalgia.
179.	2-(3-Methyl-butylidene)-melonic acid diethyl ester	Intermediate	86369-44-0	Pregabalin/treat
180.	3-aminomethyl 5-methyl hexanoic acid	Intermediate	148553-50- 8	neuropathic pain and fibromyalgia.
181.	s(+)Pregabalin mandalate salt	Intermediate	4118-51-8	

182.	Atorvastatin calcium trihydrate	API	134523-03- 8	API/ to reduce such risk even if your cholesterol levels are normal.
183.	[6-(2-Amino-ethyl)-2,2-dimethyl- [1,3]dioxan-4-yl]-acetic acid tert- butyl ester	Intermediate	125-86-0	
184.	(6-{2-[2-(4-Fluoro-phenyl)-5- isopropyl-3- phenyl-4- phenylcarbamoyl-pyrrol-1-yl]- ethyl}-2,2-dimethyl-[1,3]dioxan-4- yl)- acetic acid tert-butyl ester	Intermediate	265989-42- 2	Atorvastatin calcium trihydrate/ to reduce such risk even if your cholesterol levels are
185.	7-[2-(4-Fluoro-phenyl)-5-isopropyl- 3-phenyl- 4-phenylcarbamoyl- pyrrol-1-yl]-3,5- dihydroxy- heptanoic acid tert-butyl ester	Intermediate	125971-95- 1	normal.
186.	Rosuvastatin Calcium	API	147098-20- 2	API/help lower "bad" cholesterol
187.	N-[4-(4-Fluoro-phenyl)-5-formyl-6- isopropyl-pyrimidin-2-yl]-N-methyl - methanesulfonamide	Intermediate	29096-933	
188.	3-(tert-Butyl-dimethyl-silanyloxy)-7- [4-(4-fluoro-phenyl)-6- isopropyl-2- (methanesulfonyl-methyl-amino) - pyrimidin-5-yl]-5-oxo-hept-6-enoic acid methyl ester	Intermediate	355806-00- 7	Rosuvastatin Calcium/
189.	7-[4-(4-Fluoro-phenyl)-6-isopropyl- 2-(methanesulfonyl -methyl- amino)-pyrimidin-5-yl]-3-hydroxy - 5-oxo-hept-6-enoic acid methyl ester	Intermediate	147118-39- 6	help lower "bad" cholesterol
190.	7-[4-(4-Fluoro-phenyl)-6-isopropyl- 2-(methanesulfonylmethyl- amino)- pyrimidin-5-yl]-3,5-dihydroxyhept- 6-enoic acid methyl ester	Intermediate	147118-40- 9	
191.	Hydroxychloroquine	API	118-42-3	API/treat rheumatoid arthritis and systemic lupus erythematosus
192.	4, 7-Dichloroquinoline	Intermediate	86-98-6	Hydroxychloroquine/ treat rheumatoid arthritis and systemic lupus erythematosus
193.	Torsemide	API	56211-40-6	API /Heart failure, liver disease, and kidney disease
194.	(2-aminobenzenesulfonic acid)	Intermediate	88-21-1	Torsemide /Heart
195.	(4-chloropyridine-3-sulfonamide)	Intermediate	18368-64-4	failure, liver disease.
196.	(4-(m-toiylamino)pyridine-3- sulfonamide)	Intermediate	72811-73-5	and kidney disease
197.	Amisulpride	API	53583-79-2	API /Antipsychotic
198.	Irbesartan	API	138402-11- <u>6</u>	API /Antihypertensive
199.	(4'-(2-Butyl-4-oxo-1,3- diazaspiro[4,4]non-1-ene-3-yl methyl)biphenyl-2-carbonitrile)	Intermediate	138401-24- 8	Irbesartan /Blood pressure,heart attacks, and kidney problems

200.	(2-n-butyl-4-spiro cyclopenetrate-1- ((2'-triphenyl methyl tetrazol-5-yl) biphenyl-4-yl methyl)-2-imidazole)	Intermediate	124751-00- 4	
201.	Flurbiprofen	API	5104-49-4	API /Painkiller
202.	Cloxacillin Sodium	API	7081-44-9	API /Antibiotic
203.	Terbinafine Hydrochloride	API	78628-80-5	API /Antifungal
204.	Roxithromycin	API	80214-83-1	API /Antibiotic
205.	Lisinopril	API	83915-83-7	API /Antihypertensive
206.	Hydrochlorothiazide	API	58-93-5	API/Antihypertensive
207.	Atenolol	API	29122-68-7	API /Antihypertensive
208.	Domperidone	API	57808-66-9	API /Antiemetic
209.	Dabigatran etexilate mesylate	API	211915-06- 9	API /prevent blood clots
210.	(3-(3-Amino-4-methylamino- benzoyl)-pyridine-2-yl-amino)- propionic acid ethyl ester) & ((4- Cyano-phenylamino)acetic acid)	Intermediate	42288-26-6	
211.	(3-({2-[(4-cyano-phenylamino)- methyl]-1-methyl-1H- benzoimidazole-5-carbonyl}- pyridine-2-yl-amino)-propionic acid ethyl ester methane sulfoate)	Intermediate	211915-84- 3	
212.	(3-({2-[(4-carbamimidoyl- phenylamino)-methyl]-1-methyl- 1H-benzoimidazole-5-carbonyl}- pyridine-2-yl-amino)-propionic acid ethyl ester hydrogen chloride)	Intermediate	7647-01-0	Dabigatran /prevent blood clots
213.	(3-[(2-{[4-(Hexyloxycarbonylamino- imino-methyl)-phenylamino)- methyl}-1-methyl-1H- benzoimidazole-5-carbonyl)- pyridine-2-yl-amino]-propionic acid ethyl ester)	Intermediate	211915-06- 9	
214.	Strontium Renelate	API	135459-90- 4	API /Osteoporosis
215.	(Diethyl 3-oxopentanedioate)	Intermediate	105-50-0	
216.	(Ethyl 5-amino-4-cyano-3-(2- ethoxy-2-oxoethyl)thiophene-2- carboxylate)	Intermediate	58168-20-0	Strontium Renelate /postmenopausal
217.	(diethyl 2,2'-((3-cyano-4-(2-ethoxy- 2-oxoethyl)-5-(ethoxycarbonyl) thiophen-2-yl)azanediyl)diacetate)	Intermediate	58194-26-6	osteoporosis
218.	Phenylephirine HCI	API	61-76-7	API /stuffy nose, sinus, and ear symptoms
219.	(3-acetylphenyl acetate)	Intermediate	2454-35-5	
220.	(3-(2-bromoacetyl)phenyl acetate or 2-(benzyl(methyl)amino-1-(3- hydroxyphenyl)ethane-1-one)	Intermediate	38396-89-3 & 71786-67-9	Phenylepherine HCl /stuffy nose, sinus, and ear symptoms
221.	(3-(1-hydroxy-2- (methylamino)ethyl)phenol)	Intermediate	532-38-7	

222.	Cetrizine Dihydrochloride	API	83881-52-1	API /Relieve allergy symptoms such as watery eyes, runny nose, itching eyes/nose, sneezing, hives, and itching
223.	4-chloro benzhydryl piperazine ethanol	Intermediate	109806-71- 5	Cetrizine Dihydrochloride /Relieve allergy symptoms such as watery eyes, runny nose, itching eyes/nose, sneezing, hives, and itching
224.	Itopride Hydrochloride	API	122892-31- 3	API /Gastrointestinal symptoms of functional, nonulcer dyspepsia (chronic gastritis)
225.	Rabeprazole Sodium	API	117976-90- 6	API /Gastroesophageal reflux disease (GERD)
226.	(2-[4-(3-methoxy-propoxy)-3- methyl-pyridin-2- yimethanesulfinyl]-1H- benzomidazole)	Intermediate	117977-21- 6	Rabeprazole Sodium/gastroesophage al reflux disease (GERD), duodenal ulcers
227.	Donepezil Hydrochloride	API	120011-70- 3	API /Antidepressant
228.	Celecoxib	API	169590-42- 5	API /pain or inflammation
229.	(4,4,4-trifluoro-1-(4-methyl phenyl) butano-1,3-diono)	Intermediate	720-94-5	Celecoxib/pain or inflammation
230.	Pantoprazole Sodium	API	138786-67- 1	API /stomach and esophagus problems
231.	(5-Difluoromethoxy-2-(3,4- dimethoxy-pyridin-2- yimethylsulfanyl)-1H- benzoimidazole)	Intermediate	102625-64- 9	Pantoprazole Sodium /stomach and esophagus problems
232.	Artemether	API	71963-77-4	API /Antimalerial
233.	Ampicillin Trihydrate	API	7177-48-2	API /Antibiotic
234.	Levosulpiride	API	23672-07-3	API /symptoms of schizophrenia, anxiety disorders, and dysthymia
235.	(2-methoxybenzoic acid)	Intermediate	579-75-9	
236.	(2-methoxy-5-sulfamoylbenzoic acid)	Intermediate	22117-85-7	Levosulpiride /symptoms of
237.	(Methyl 1,2-methoxy-5- sulfamoylbenzolate)	Intermediate	33045-52-2	schizophrenia, anxiety disorders, and
238.	S-1-Ethyl-2-aminomethyl pyrolindine	Intermediate	22795-99-9	dysthymia
239.	Moxifloxacin HCI	API	186826-86- 8	API /Antibiotic
240.	(5,8-dihydronaphthalen-1-yl acetate)	Intermediate	51927-56-1	Moxifloxacin/ Antibiotic
241.	Clotrimazole	API	23593-75-1	API /Antifungal

242.	Famotidine	API	76824-35-6
243.	Amlodipine maleate	API	1185246- 15-4
244.	Bisacodyl	API	603-50-9
245.	Doxofylline	API	69975-86-6
246.	Diprofyllin	Intermediate	479-18-5
247.	Theophylline-7-acetal	Intermediate	5614-53-9
248.	Esomeprazole Magnesium	API	161973-10- 0
249.	Ivabradine Hydrochloride	API	148849-67- 6
250.	Etoricoxib	API	202409-33- 4
251.	Omeprazole Magnesium	API	95382-33-5
252.	Amlodipine Besylate	API	88150-42-9
253.	Prasugrel	API	150322-43- 3
254.	5-[a-cyclopropyl carbonyl-2-fluoro benzyle)-2-nitro-4,5,6,7- tetrahydrothieno[3,2-c]pyridine HCl	Intermediate	
255.	2-amino-5(-[α-cyclopropyl carbonyl-2-fluoro benzyl)-4,5,6,7- tetrahydrothieno[3,2-c]pyridine HCl	Intermediate	
256.	Nicorandil	API	65141-46-0
257.	N-(2-Hydroxyethyl)pyridine-3- carboxamide	Intermediate	6265-73-2
258.	Cilansetron	API	120635-74- 7
259.	Sitagliptine	API	486460-32- 6
260.	Tiotropium Bromide	API	186691-13- 4
261.	Silodosin	API	160970-54- 7
262.	Solifenacin	API	242478-38- 2

API/ used to treat ulcers
of the stomach and
intestines
API/to prevent certain
types of chest pain
(angina).
API/stimulant laxatives
API/treatment of asthma
Doxofylline/ treatment of
asthma
API/ to treat certain
stomach and esophagus
problems
API/ to treat heart failure
API/Pain killers
API/ to treat certain
stomach and esophagus
problems
API/ treatment of
chronic stable angina
API/Antiplatelet
API/ treatment of
chronic stable angina
Nicorandil/ treatment of
chronic stable angina
nectoris
API/ treatment of
diarrhoea-predominant
irritable bowel syndrome
(IBS)
API/ to control high
blood sugar
API/ to control and
prevent symptoms
caused by ongoing lung
disease
API/ to treat signs and
symptoms of an
enlarged prostate gland
API/to treat an
overactive bladder

263.	Hydroxy Chloroquine Sulfate	API	747-36-4		API/ to prevent and treat malaria & treatment of rheumatoid arthritis, lupus, and porphyria cutaneatarda.
264.	Febuxosate	API	API 144060-53- 7		API/ to prevent gout attacks by reducing the levels of uric acid in your blood
265.	Lornoxicam	API	70374-39-9		API/nonsteroidal anti- inflammatory drug
266.	5-chloro-3-(chlorosulfonyl) thiophene-2- methylcarboxylate	Intermediate	70374-37-7		
267.	5 - Chloro-3-[[(methoxy carbonyl) amino] sulfonyl] -2- thiophene carboxylic acid methyl ester	Intermediate	70374-38-8		L ornovicom/
268.	6-chloro-4-hydroxy-2H-thieno[2,3- e]-1,2-thiazine-3-carboxylic acidmethylester1,1,-dioxide	Intermediate	70415-50-8		nonsteroidal anti- inflammatory drug
269.	6-chloro-4-hydroxy-2-methyl-2H- thieno[2,3-e]-1,2-thiazine-3- carboxylic acidmethylester1,1,- dioxide	Intermediate	70415-50-8		
	*R&D	0.1MT/M onth			
	TOTAL	100 MT/Mont h			

Brief Note of Product Profile:

- 1. No of Manufacturing Plants: 1 Nos.
- 2. Brief Note regarding number of Products to be manufactured considering plant capacity:
 - At a time 3-4 Nos. of products will be manufactured.
 - Considering plant capacity:3.5 Tone/Day

ENDUSE OF PRODUCTS

C *			In case of Intermediate stage of API			CAS No. (API	Said API is used for/End Use of said API
Sr. No	NAME OF PRODUCT	CAS	Sta	Type/	Name of		
		INO.	ge	Category	APIIN		
			1. . .	Droduct	Intermedia		
			n-1,				
			n-2,	(API/	te Used/		
1	2,2',4'-Trichloro	4252-	n_1	Intermed	Miconazol	22916	Miconazole Nitrate/treat
1.	Acetophenone	78-2	11-1	iate	e Nitrate	-47-8	vaginal yeast infections
C	Mofonamia Aaid	61-68-					API/relieve mild to
Ζ.		7	-	AFI	-	-	moderate pain
		61006	-	API			API/treat many different
3.	Amoxicillin Trihydrate	01330			-	-	types of infection caused
		-70-7					by bacteria

3-(dimethylamino)-1-(3- methoxyphenyl)-2- methylpropan-1-one	19714 5-37-2	n-1	Intermed iate	Tapentado I	17559 1-09-0	Tapentadol/ treat moderate to severe acute pain
1-(hydroxycyclohexyl)(4- methoxyphenyl)- acetonitrile	93413 -76-4	n-1	Intermed iate	Venlafaxin e	93413 -69-5	Venlafaxine/to treat depression
2-dimethylaminomethyl cyclohexanone HCI	42036 -65-7	n-1	Intermed iate	Tramadol	27203 -92-5	Tramadol/to relieve moderate to moderately severe pain.
Acetic acid 2-[4-(4-chloro- butyryl)-phenyl]-2- methyl- propyl ester	16903 2-11-5	n-4	Intermed iate	Fexofenad ine	83799 -24-0	Fexofenadine/relieve the symptoms
4-Chloro-1-[4-(2-hydroxy- 1,1-dimethyl-ethyl- phenyl]-butan-1-one	16928 0-25-5	n-3	Intermed iate	Fexofenad ine	83799 -24-0	Fexofenadine/relieve the symptoms
2-[4-(4-Chloro-butyryl)- phenyl]-2-methyl- propionic acid	16928 0-21-1	n-2	Intermed iate	Fexofenad ine	83799 -24-0	Fexofenadine/relieve the symptoms
Methyl-2-[4-(4- chlorobutanoyl) phenyl]-2- methylpropanoate	15447 7-54-0	n-1	Intermed iate	Fexofenad ine	83799 -24-0	Fexofenadine/relieve the symptoms
Fexofenadine hydrochloride	15343 9-40-8	-	API	-	-	API/to relieve allergy symptoms
2-(4-{4-[4-(Hydroxy- diphenyl-methyl)- piperidin-1-yl]-butyryl}- phenyl)-2- methyl- propionic acid methyl ester	15447 7-55-1	n-2	Intermed iate	Fexofenad ine hydrochlor ide	15343 9-40-8	Fexofenadine hydrochloride/ to relieve allergy symptoms
2-(4-{1-Hydroxy-4-[4- (hydroxy- diphenyl- methyl)-piperidin-1-yl]- butyl}-phenyl)-2-methyl- propionic acid	13845 2-21-8	n-1	Intermed iate	Fexofenad ine hydrochlor ide	15343 9-40-8	Fexofenadine hydrochloride/ to relieve allergy symptoms
2, 3,4, 5-Bis-O-(1- MethylEthylidene)-B-D- fructo pyranose	20880 -92-6	n-1	Intermed iate	Topiramat e	97240 -79-4	Topiramate/treat epilepsy
Lumefantrine	82186 -77-4	-	API	-	-	API/treat non-severe malaria.
2-choloro-1-(2,7-dichloro- 9H-fluoren-4-yl)ethan-1- one	13102 3-37-5	n-3	Intermed iate	Lumefantri ne	82186 -77-4	Lumefantrine/treat non- severe malaria.
2-chloro-1-(2,7-dichloro- 9H-fluoren-4-yl)ethane-1- ol	13746 44-82- 2	n-2	Intermed iate	Lumefantri ne	82186 -77-4	Lumefantrine/treat non- severe malaria
2-(dibutylamino)-1-(2,7- dichloro - 9H-fluoren-4- yl)ethanol	53221 -07-1	n-1	Intermed iate	Lumefantri ne	82186 -77-4	Lumefantrine/treat non- severe malaria
3-chloro-1-phenyl propan- 1-ol	18776 -12-0	n-2	Intermed iate	Dapoxetin e	12993 8-20-1	Dapoxetine/treatment of premature ejaculation
Hydroxyl Naphthyl Ether	93-20- 9	n-1	Intermed iate	Dapoxetin e	12993 8-20-1	Dapoxetine/treatment of premature ejaculation
	3-(dimethylamino)-1-(3- methoxyphenyl)-2- methylpropan-1-one 1-(hydroxycyclohexyl)(4- methoxyphenyl)- acetonitrile 2-dimethylaminomethyl cyclohexanone HCl Acetic acid 2-[4-(4-chloro- butyryl)-phenyl]-2- methyl- propyl ester 4-Chloro-1-[4-(2-hydroxy- 1,1-dimethyl-ethyl- phenyl]-butan-1-one 2-[4-(4-Chloro-butyryl)- phenyl]-butan-1-one 2-[4-(4-Chloro-butyryl)- phenyl]-2-methyl- propionic acid Methyl-2-[4-(4- chlorobutanoyl) phenyl]-2- methylpropanoate Fexofenadine hydrochloride 2-(4-{4-[4-(Hydroxy- diphenyl-methyl)- piperidin-1-yl]-butyryl}- phenyl)-2- methyl- propionic acid methyl ester 2-(4-{1-Hydroxy-4-[4- (hydroxy- diphenyl- methyl)-piperidin-1-yl]- butyl}-phenyl)-2-methyl- propionic acid 2, 3,4, 5-Bis-O-(1- MethylEthylidene)-B-D- fructo pyranose Lumefantrine 2-chloro-1-(2,7-dichloro- 9H-fluoren-4-yl)ethan-1- ol 2-(dibutylamino)-1-(2,7- dichloro-9H-fluoren-4- yl)ethanol 3-chloro-1-phenyl propan- 1-ol Hydroxyl Naphthyl Ether	3-(dimethylamino)-1-(3- methoxyphenyl)-2- methylpropan-1-one 19714 5-37-2 19714 1-(hydroxycyclohexyl)(4- methoxyphenyl)- acetonitrile 93413 2-dimethylaminomethyl cyclohexanone HCl 42036 2-dimethylaminomethyl cyclohexanone HCl 42036 -65-7 Acetic acid 2-[4-(4-chloro- butyryl)-phenyl]-2- methyl- propyl ester 16903 4-Chloro-1-[4-(2-hydroxy- 1,1-dimethyl-ethyl- phenyl]-butan-1-one 16928 2-[4-(4-Chloro-butyryl)- phenyl]-2-methyl- propionic acid 16928 0-21-1 16928 Methyl-2-[4-(4- chlorobutanoyl) phenyl]-2- methylpropanoate 15447 7-54-0 15447 Fexofenadine hydrochloride 15343 9-40-8 2-(4-{4-[4-[4-(Hydroxy- diphenyl-methyl]- phenyl]-2- methyl- propionic acid methyl ester 15447 2-(4-{4-[4-[4-(Hydroxy- diphenyl-methyl]- phenyl]-2- methyl- propionic acid methyl ester 13845 2-(4-{1-Hydroxy-4-[4- (hydroxy-4-[4- (hydroxy-4-[4- (hydroxy-4-[4- (hydroxy-4-[4- (hydroxy-4-]4- (hydroxy-4-]4- (hydroxy-4-]4- (hydroxy-4-]4- (hydroxy-4-]4- (hydroxy-4-]4- ol 20880 -92-6 Lumefantrine 82186 -77-4 2-choloro-1-(2,7-dichloro- 92-6 Lumefantrine ol 13102 3-37-5 3-37-5 2-c	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	

21.	Dapoxetine	11935 6-77-3	-	API	-	-	API/treatment
22.	2-methoxybenzoic acid	579- 75-9	n-1	Intermed iate	Lamotrigin e	84057 -84-1	Lamotrigine/prevent and control seizures.
23.	3-chloro-N-(3- hydroxyphenyl)propanami de	50297 -40-0	n-2	Intermed iate	Acetamino phen	103- 90-2	Acetaminophen/treat mild to moderate pain
24.	3-chloro-N-(4- hydroxyphenyl)propanami de	19314 -10-4	n-1	Intermed iate	Acetamino phen	103- 90-2	Acetaminophen/treat mild to moderate pain
25.	7-Hydroxy-3,4- dihydroquinolin-2(1H)-one	22246 -18-0	n-2	Intermed iate	Aripiprazol e	12972 2-12-9	Aripiprazole/ treat certain mental/mood disorders
26.	6-Hydroxy-3,4- dihydroquinolin-2(1H)-one	54197 -66-9	n-1	Intermed iate	Cilostazol	73963 -72-1	Cilostazol/improve the symptoms of a certain blood flow problem in the legs
27.	Azithromycin dihydrate	11777 2-70-0	-	API	-	-	API/treat a wide variety of bacterial infections
28.	Bupropion Hydrochloride	31677 -93-7	-	API	-	-	API/treat major depressive disorder and seasonal affective disorder.
29.	3-Bromo-1-(3-chloro- phenyl) -propan-1-one	50001 1-86-9	n-2	Intermed iate	Bupropion Hydrochlor ide	31677 -93-7	Bupropion Hydrochloride/treat major depressive disorder and seasonal affective disorder.
30.	Bupropion	34841 -39-9	n-1	Intermed iate	Bupropion Hydrochlor ide	31677 -93-7	Bupropion Hydrochloride/treat major depressive disorder and seasonal affective disorder.
31.	Carisoprodol	78-44- 4	-	API	-	-	API/treat muscle pain and discomfort.
32.	5-Methyl-5-propyl- [1,3]dioxan-2-one	7148- 50-7	n-2	Intermed iate	Carisopro dol	78-44- 4	Carisoprodol/ treat muscle pain and discomfort.
33.	Isopropyl-carbamic acid 2-hydroxymethyl -2- methyl-pentyl ester	25462 -17-3	n-1	Intermed iate	Carisopro dol	78-44- 4	Carisoprodol/ treat muscle pain and discomfort.
34.	Cinacalcet Hydrochloride	36478 2-34-3	-	API	-	-	API
35.	Methanesulfonic acid 3- (3-trifluoro methyl- phenyl)-propyl ester	21172 -43-0	n-2	Intermed iate	Cinacalcet Hydrochlor ide	36478 2-34-3	Cinacalcet Hydrochloride/treat secondary hyperparathyroidism
36.	(1-Naphthalen-1-yl-ethyl)- [3-(3-trifluoromethyl- phenyl)-propyl]-amine	12719 30-12- 1	n-1	Intermed iate	Cinacalcet Hydrochlor ide	36478 2-34-3	Cinacalcet Hydrochloride/treat secondary hyperparathyroidism
37.	Clopidogrel Bisulphate	12020 2-66-6	-	API	-	-	API/treat new/worsening chest pain
38.	2-(thiophen-2-yl)ethanol	5402- 55-1	n-4	Intermed iate	Clopidogre I Bisulphate	12020 2-66-6	Clopidogrel Bisulphate/ treat new/worsening chest pain

39.	2-(Thiophen-2-yl)ethyl 4- methylbenzenesulfonate	40412 -06-4	n-3	Intermed iate	Clopidogre I Bisulphate	12020 2-66-6	Clopidogrel Bisulphate/ treat new/worsening chest pain
40.	(S)-Methyl 2-(2- chlorophenyl)- 2-((2- (thiophen-2- yl)ethyl)amino)acetate hydrochloride	14110 9-19-5	n-2	Intermed iate	Clopidogre I Bisulphate	12020 2-66-6	Clopidogrel Bisulphate/ treat new/worsening chest pain
41.	(S)-Methyl 2-(2- chlorophenyl)-2-(6,7- dihydrothieno [3,2- c]pyridin-5(4H)-yl)acetate sulfate	12020 2-71-3	n-1	Intermed iate	Clopidogre I Bisulphate	12020 2-66-6	Clopidogrel Bisulphate/ treat new/worsening chest pain
42.	Fluconazole	86386 -73-4	-	API	-	-	API/prevent and treat a variety of fungal and yeast infections
43.	(2,4-Difluoro-2-(1h- 1,2,4- Triazole-1-YI) Acetophenone)	86404 -63-9	n-2	Intermed iate	Fluconazol e	86386 -73-4	Fluconazole/ prevent and treat a variety of fungal and yeast infections
44.	1-[2-(2,4-di fluorophenyl)- 2,3-epoxypropyl]-1H- 1,2,4-Triazole	86386 -76-7	n-1	Intermed iate	Fluconazol e	86386 -73-4	Fluconazole/ prevent and treat a variety of fungal and yeast infections
45.	Ketoconazole	65277 -42-1	-	API	-	-	API/ treat serious fungal infections including: blastomycosis
46.	Cis –Bromo benzoate	61397 -56-6	n-4	Intermed iate	Ketoconaz ole	65277 -42-1	Ketoconazole/ treat serious fungal infections including: blastomycosis
47.	Cis-Imidazolealcoho	506- 43-4	n-3	Intermed iate	Ketoconaz ole	65277 -42-1	Ketoconazole/ treat serious fungal infections including: blastomycosis
48.	Cis –Tosylate	15400 3-23-3	n-2	Intermed iate	Ketoconaz ole	65277 -42-1	Ketoconazole/ treat serious fungal infections including: blastomycosis
49.	1-Acetyl-4-(4-hydroxy phenyl)piperazine	67914 -60-7	n-1	Intermed iate	Ketoconaz ole	65277 -42-1	Ketoconazole/ treat serious fungal infections including: blastomycosis
50.	Levocetirizine Dihydrochloride	13001 8-77-8	-	API	-	-	API/relieve allergy symptoms
51.	1-Methanesulfonyl-4- methylbenzene,(2-chloro- ethyl)- chloromethylamine	1671- 18-7	n-4	Intermed iate	Levocetiriz ine Dihydrochl oride	13001 8-77-8	Levocetrizine Dihydrochloride/relieve all ergy symptoms
52.	1-[(4-Chloro-phenyl)- phenyl-methyl]-4- (toluene-4-sulfonyl)- piperazine	16383 7-56-7	n-3	Intermed iate	Levocetiriz ine Dihydrochl oride	13001 8-77-8	Levocetrizine Dihydrochloride/relieve all ergy symptoms
53.	1-[(4-Chloro-phenyl)- phenyl -methyl]- piperazine	38212 -33-8	n-2	Intermed iate	Levocetiriz ine Dihydrochl oride	13001 8-77-8	Levocetrizine Dihydrochloride/relieve all ergy symptoms

54.	1-{4-[(4-Chloro-phenyl)- phenyl -methyl]-piperazin- 1-yl}-ethanol	10980 6-71-5	n-1	Intermed iate	Levocetiriz ine Dihydrochl oride	13001 8-77-8	Levocetrizine Dihydrochloride/relieve all ergy symptoms
55.	Memantine HCI	41100 -52-1	-	API	-	-	API/treat moderate to severe confusion
56.	N-(3,5 dimethyladamantan-1- yl)urea	19982 -07-1	n-2	Intermed iate	Memantin e HCl	41100 -52-1	Memantine HCI/ treat moderate to severe confusion
57.	(3,5, dimethyladamantan- 1-amine)	41100 -52-1	n-1	Intermed iate	Memantin e HCl	41100 -52-1	Memantine HCI/ treat moderate to severe confusion
58.	Quetiapine Fumarate	11197 4-69-7	-	API	-	-	API/treat certain mental/mood conditions
59.	11-Piperazin-1-yl- dibenzo[b,f] [1,4]thiazepine	11197 4-74- 4	n-2	Intermed iate	Quetiapine Fumarate	11197 4-69-7	Quetiapine Fumarate/treat certain mental/mood conditions
60.	2-[2-(4- Dibenzo[b,f][1,4]thiazepin- 11-yl -piperazin-1-yl)- ethoxy]-ethanol	10761 99-40- 0	n-1	Intermed iate	Quetiapine Fumarate	11197 4-69-7	Quetiapine Fumarate/treat certain mental/mood conditions
61.	Simvastatin	79902 -63-9	-	API	-	-	API/lower cholesterol
62.	2-Methyl-butyric acid 8-(6- butylcarbamoyl-3,5- dihydroxy-hexyl)-3,7- dimethyl- 1,2,3,7,8,8ahexahydro- naphthalen-1-yl ester	86323 9-60-5	n-4	Intermed iate	Simvastati n	79902 -63-9	Simvastatin/lower cholesterol
63.	2-Methyl-butyric acid 8-[6- butylcarbamoyl-3,5-bis- (tert-butyldimethyl- silanyloxy)-hexyl]-3,7- dimethyl-1,2,3,7,8,8a- hexahydronaphthalen- 1- yl ester	239- 510-5	n-3	Intermed iate	Simvastati n	79902 -63-9	Simvastatin/lower cholesterol
64.	2,2-Dimethyl-butyric acid 8-[6-butylcarbamoyl-3,5- bis-(tert-butyldimethyl- silanyloxy)-hexyl]-3,7- dimethyl-1,2,3,7,8,8a- hexahydronaphthalen- 1- yl est	97369 -75-0	n-2	Intermed iate	Simvastati n	79902 -63-9	Simvastatin/lower cholesterol
65.	Simvastatin Amide	10023 47-71- 8	n-1	Intermed iate	Simvastati n	79902 -63-9	Simvastatin/lower cholesterol
66.	Telmisartan	14470 1-48-4	-	API	-	-	API/treat high blood pressure (hypertension)
67.	methyl-4-methyl-1,1- biphenyl- 2-carboxylate	49742 -56-5	n-4	Intermed iate	Telmisarta n	14470 1-48-4	Telmisartan/treat high blood pressure (hypertension)

68.	4-(bromomethyl)biphenyl- 2- carboxylic acid methyl ester	11477 2-38-2	n-3	Intermed iate	Telmisarta n	14470 1-48-4	Telmisartan/treat high blood pressure (hypertension)
69.	methyl 4'-((1,7'-dimethyl- 2'-propyl-1H,3'H-[2,5'- bibenzo[d]imidazol]-3'- yl)methyl)-[1,1'-biphenyl]- 2- carboxylate	10263 53-20- 7	n-2	Intermed iate	Telmisarta n	14470 1-48-4	Telmisartan/treat high blood pressure (hypertension)
70.	4'-((1,7'-dimethyl-2'- propyl-1H,3'H-[2,5'- bibenzo[d]imidazol]-3'- yl)methyl)-[1,1'-biphenyl]- 2- carboxylic acid	14470 2-26-1	n-1	Intermed iate	Telmisarta n	14470 1-48-4	Telmisartan/treat high blood pressure (hypertension)
71.	Ziprasidone Hydrochloride	13898 2-67-9	-	API	-	-	API/ treat schizophrenia
72.	6-Chloro-5-(2-chloro- ethyl)- 1,3-dihydro-2H indol-2-one	11828 9-55-7	n-3	Intermed iate	Ziprasidon e Hydrochlor ide	13898 2-67-9	Ziprasidone Hydrochloride/ treat schizophrenia
73.	3-Piperazin-1-yl-1,2- benzisothiozole hydrochloride	87691 -87-0	n-2	Intermed iate	Ziprasidon e Hydrochlor ide	13898 2-67-9	Ziprasidone Hydrochloride/ treat schizophrenia
74.	Ziprasidone	14693 9-27-7	n-1	Intermed iate	Ziprasidon e Hydrochlor ide	13898 2-67-9	Ziprasidone Hydrochloride/ treat schizophrenia
75.	Carvedilol	72956 -09-3	-	API	-	-	API/treat high blood pressure
76.	1,3cyclohexandione mono phenyl hydrazone	27385 -45-1	n-4	Intermed iate	Carvedilol	72956 -09-3	Carvedilol/treat high blood pressure
77.	1,2,3,4- tetrahydrocarbazol-4-one	15128 -52-6	n-3	Intermed iate	Carvedilol	72956 -09-3	Carvedilol/treat high blood pressure
78.	4-hydroxy-9-(H) carbazole	52602 -39-8	n-2	Intermed iate	Carvedilol	72956 -09-3	Carvedilol/treat high blood pressure
79.	4-oxyranylmethoxy-9-(H)- carbazole	51997 -51-4	n-1	Intermed iate	Carvedilol	72956 -09-3	Carvedilol/treat high blood pressure
80.	Omeprazole	73590 -58-6	-	API	-	-	API/ treat the symptoms of gastroesophageal reflux disease
81.	3,5-Dimethyl-4-nitro- pyridine N-oxide	14248 -66-9	n-4	Intermed iate	Omeprazo le	73590 -58-6	Omeprazole/ treat the symptoms of gastroesophageal reflux disease
82.	(4-methoxy-3,5- dimethylpyridin-2- yl)methanol	86604 -78-6	n-3	Intermed iate	Omeprazo le	73590 -58-6	Omeprazole/ treat the symptoms of gastroesophageal reflux disease
83.	2-(chloromethyl)-4- methyoxy-3,5- dimethylpyridine	86604 -75-3	n-2	Intermed iate	Omeprazo le	73590 -58-6	Omeprazole/ treat the symptoms of gastroesophageal reflux disease
84.	5-Methoxy-2-(4-methoxy- 3,5-dimethyl-pyridine-2- ylmethylsulfanyl)-1H- benzoimidazole	73590 -85-9	n-1	Intermed iate	Omeprazo le	73590 -58-6	Omeprazole/ treat the symptoms of gastroesophageal reflux disease

85.	Lansoprazole	10357	-	API	-	-	API/treat certain stomach
86.	4-nitro-2,3-dimethyl pyridine-N-oxide	37699 -43-7	n-4	Intermed iate	Lansopraz ole	10357 7-45-3	Lansoprazole /treat certain stomach and esophagus problems
87.	2-Hydroxy methyl-3- methyl pyridine hydrochloride	11817 -10-3	n-3	Intermed iate	Lansopraz ole	10357 7-45-3	Lansoprazole /treat certain stomach and esophagus problems
88.	2-chloromethyl-3-methyl pyridine hydrochloride	15325 9-31-5	n-2	Intermed iate	Lansopraz ole	10357 7-45-3	Lansoprazole /treat certain stomach and esophagus problems
89.	2[4-(2,2,2-Tri fluoro ethoxy)-3-methyl pyridine]methyl thio-1H- Benzimidazole	12733 7-60-4	n-1	Intermed iate	Lansopraz ole	10357 7-45-3	Lansoprazole /treat certain stomach and esophagus problems
90.	Etoricoxib	20240 9-33-4	-	API	-	-	Etoricoxib/ reduce the pain and swelling
91.	1-(4-Methanesulfonyl- Phenyl)-ethanone	10202 37-77- 7	n-4	Intermed iate	Etoricoxib	20240 9-33-4	Etoricoxib/ reduce the pain and swelling
92.	(4-Methanesulfonyl- Phenyl)-acetic acid	90536 -66-6	n-3	Intermed iate	Etoricoxib	20240 9-33-4	Etoricoxib/ reduce the pain and swelling
93.	2-(4-Methanesulfonyl- Phenyl)-1-(6-methyl- pyridin-3-yl)-ethanone	22161 5-75-4	n-2	Intermed iate	Etoricoxib	20240 9-33-4	Etoricoxib/ reduce the pain and swelling
94.	(2-Chloro-3- dimethylamino-allylidene)- dimethyl-ammonium Salt of Phosphorus Hexafluoride	29175 6-76-8	n-1	Intermed iate	Etoricoxib	20240 9-33-4	Etoricoxib/ reduce the pain and swelling
95.	Lurasidone hydrochloride	36751 4-88-3	-	API	-	-	API/treat certain mental/mood disorders
96.	Methanesulfonic acid 2- methane sulfonyloxymethyl- cyclohexyl methyl ester	75-75- 2	n-1	Intermed iate	Lurasidon e hydrochlor ide	36751 4-88-3	Lurasidone hydrochloride /treat certain mental/mood disorders
97.	Irbesartan	13840 2-11-6	-	API	-	-	API/treat high blood pressure
98.	2-Butyl-4- spirocyclopentane-2- imidazolin-5-one hydrochloride	15125 7-01-1	n-3	Intermed iate	Irbesartan	13840 2-11-6	Irbesartan/ treat high blood pressure
99.	4-Bromomethyl-2- cyanobiphenyl	11477 2-54-2	n-2	Intermed iate	Irbesartan	13840 2-11-6	Irbesartan/ treat high blood pressure
100.	4'-(2-Butyl-4-oxo-1,3- diaza-spiro[4.4]non-1-en- 3-ylmethyl)-biphenyl-2- carbonitrile	13840 1-24- 8	n-1	Intermed iate	Irbesartan	13840 2-11-6	Irbesartan/ treat high blood pressure

101.	Monetelucast Sodium	15176 7-02-1	-	API	-	-	API/control and prevent symptoms caused by asthma
102.	1-(3-[2-(7-Chloro-quinolin- 2-yl)-vinyl]-phenyl)-3-[2- (1-hydroxy-1-methyl- ethyl)-phenyl]-propane-1- ol	28793 0-77-2	n-4	Intermed iate	Moneteluc ast Sodium	15176 7-02-1	Monetelucast Sodium/ control and prevent symptoms caused by asthma
103.	Methane sulfonic acid 1- (3-[2-(7-Chloro-quinolin-2- yl)-vinyl]-phenyl)-3-[2-(1- hydroxy-1-methyl-ethyl)- phenyl]-propyl ester	75-92- 3	n-3	Intermed iate	Moneteluc ast Sodium	15176 7-02-1	Monetelucast Sodium/ control and prevent symptoms caused by asthma
104.	1-{1-(3-[2-(7-Chloro- quinolin-2-yl)-vinyl]- phenyl)-3-[2-(1-hydroxy-1- methyl-ethyl)-phenyl]- propylsulfanylmethyl}- cyclopropyl)-acetic acid	20080 4-28-0	n-2	Intermed iate	Moneteluc ast Sodium	15176 7-02-1	Monetelucast Sodium/ control and prevent symptoms caused by asthma
105.	Montelukast Dicyclohexylamine	57795 3-88-9	n-1	Intermed iate	Moneteluc ast Sodium	15176 7-02-1	Monetelucast Sodium/ control and prevent symptoms caused by asthma
106.	Folic acid	59-30- 3	-	API	-	-	API/treat folic acid deficiency and certain types of anemia
107.	4-Nitro benzoyl Chloride	122- 04-3	n-4	Intermed iate	Folic acid	59-30- 3	Folic acid/treat folic acid deficiency and certain types of anemia
108.	2-(4-Nitro benzoyl amino)pentanedionic	6758- 40-3	n-3	Intermed iate	Folic acid	59-30- 3	Folic acid/treat folic acid deficiency and certain types of anemia
109.	2-(4-Aminobenzoyl amino)pentanedionic acid	4230- 33-5	n-2	Intermed iate	Folic acid	59-30- 3	Folic acid/treat folic acid deficiency and certain types of anemia
110.	1,1,3-Trichloro propane-2- one	96-18- 4	n-1	Intermed iate	Folic acid	59-30- 3	Folic acid/treat folic acid deficiency and certain types of anemia
111.	Bisoprolol Fumarate	66722 -44-9	-	API	-	-	API/treat high blood pressure (hypertension)
112.	(4-((2- isopropoxyethoxy)methyl) phenol)	17703 4-57-0	n-3	Intermed iate	Bisoprolol Fumarate	66722 -44-9	Bisoprolol Fumarate /treat high blood pressure (hypertension)
113.	(2-((4-((2- isopropoxyethoxy)methyl) phenoxy)methyl)oxirane)	621- 87-4	n-2	Intermed iate	Bisoprolol Fumarate	66722 -44-9	Bisoprolol Fumarate /treat high blood pressure (hypertension)
114.	(1-(4-((2- isopropoxyethoxy)methyl) phenoxy)-3- (isopropylamino)propan- 2-ol)	12153 42-36- 1	n-1	Intermed iate	Bisoprolol Fumarate	66722 -44-9	Bisoprolol Fumarate /treat high blood pressure (hypertension)
115.	Erythromycin Stearate	643- 22-1	-	API	-	-	API/to treat a wide variety of bacterial infections
116.	Cephalexin	15686 -71-2	-	API	-	-	API/ treat certain infections caused by bacteria

117.	Sulbactum	69388 -84-7	-	API	-	-	API/treat certain infections
118.	prednisolone	53-03- 2	-	API	-	-	API/ treat conditions such as arthritis
119.	Metformine Hcl	 1115- 70-4	-	API	-	-	API/control high blood sugar
120.	Gabapentin	60142 -96-3	-	API	-	-	API/prevent and control seizures.
121.	(1-aminomethyl- cyclohexyl)-acetic acid)	60175 -04-4	n-1	Intermed iate	Gabapenti n	60142 -96-3	Gabapentin/prevent and control seizures.
122.	Vitamin B6	58-56- 0	-	API	-	-	API/ prevent or treat a certain nerve disorder
123.	Clavulanate potassium	61177 -45-5	-	API	-	-	API/treat many different infections
124.	Carithromycin	81103 -11-9	-	API	-	-	API/treat a wide variety of bacterial infections.
125.	Ciprofloxacin Lactate	85721 3-31-1	-	API	-	-	API/ treat serious infections
126.	Artesunate	88495 -63-0	-	API	-	-	API/treat malaria
127.	Ofloxacin	82419 -36-1	-	API	-	-	API/ treat a variety of bacterial infections
128.	Levofloxacin	10098 6-85-4	-	API	-	-	API/treat a variety of bacterial infections
129.	Tinidazole	19387 -91-8	-	API	-	-	API/treat trichomoniasis
130.	Ornidazole	16773 -42-5	-	API	-	-	API/treat people who have certain types of vaginal
131.	Meropenem	11947 8-56-7	-	API	-	-	API/ treat certain types of bacterial infections.
132.	3-[5-Dimethylcarbamoyl- 1-(4- nitrobenzyloxycarbonyl)- pyrrolidin3-ylsulfanyl]-6- (1-hydroxy-ethyl) -4- methyl-7-oxo-1-aza- bicyclo[3.2.0] hept-2-ene- 2-carboxylic acid 4-nitro- benzyl ester	90776 -58-2	n-1	Intermed iate	Meropene m	11947 8-56-7	Meropenem/ treat certain types of bacterial infections.
133.	Paracetamol	103- 90-2	-	API	-	-	API/treat aches and pain
134.	Ritonavir	15521 3-67-5	-	API	-	-	API/ treat human immunodeficiency virus (HIV) infection
135.	(1-Benzyl-4-tert- butoxycarbonylamino-2- hydroxy-5-phenylpentyl)- carbamic acid thiazol-5- ylmethyl ester	14416 3-97-3	n-4	Intermed iate	Ritonavir	15521 3-67-5	Ritonavir/ treat human immunodeficiency virus (HIV) infection
136.	Thioisobutyramide	563- 83-7	n-3	Intermed iate	Ritonavir	15521 3-67-5	Ritonavir/ treat human immunodeficiency virus (HIV) infection

137.	1-(2-Isopropylthiazol-4- yl)-N-methyl methanamine	11851 67-55- 8	n-2	Intermed iate	Ritonavir	15521 3-67-5	Ritonavir/ treat human immunodeficiency virus (HIV) infection
138.	(S)-2-(3-((2- Isopropylthiazol-4- yl)methyl)-3- methylureido)-3- methylbutanoic acid	15421 2-61-0	n-1	Intermed iate	Ritonavir	15521 3-67-5	Ritonavir/ treat human immunodeficiency virus (HIV) infection
139.	Diclofenac Sodium	15307 -79-6	-	API	-	-	API/to relieve pain, tenderness, swelling, and stiffness caused by osteoarthritis
140.	Aspirin	50-78- 2	-	API	-	-	API/ reduce fever and relieve mild to moderate pain from conditions such as muscle aches
141.	Carbidopa	28860 -95-9	-	API	-	-	API/ treat the symptoms of Parkinso n's disease or Parkinson- like symptoms
142.	Methyl Dopa Methyl Ester	18181 -08-3	n-3	Intermed iate	Carbidopa	28860 -95-9	Carbidopa/ treat the symptoms of Parkinso n's disease or Parkinson- like symptoms
143.	3 3-pentamethylene oxaziridine	1130- 32-1	n-2	Intermed iate	Carbidopa	28860 -95-9	Carbidopa/ treat the symptoms of Parkinso n's disease or Parkinson- like symptoms
144.	Carbidopa Methyl Ester	91431 -01-5	n-1	Intermed iate	Carbidopa	28860 -95-9	Carbidopa/ treat the symptoms of Parkinso n's disease or Parkinson- like symptoms
145.	Carbamazepine	298- 46-4	-	API	-	-	API/treat trigeminal neuralgia
146.	Olmesartan	14468 9-63-4	-	API	-	-	API/treat high blood pressure
147.	Acyclovir	59277 -89-3	-	API	-	-	API/treatment of herpes simplex virus infections of the skin
148.	Diacetyl Guanine	3056- 33-5	n-2	Intermed iate	Acyclovir	59277 -89-3	Acyclovir / treatment of herpes simplex virus infections of the skin
149.	Diacetyl acyclovir	75128 -73-3	n-1	Intermed iate	Acyclovir	59277 -89-3	Acyclovir / treatment of herpes simplex virus infections of the skin
150.	Lopinavir	19272 5-17-0	-	API	-	-	API/ treat human immunodeficiency virus (HIV) infection

151.	Clindamycin Phosphate	24729 -96-2	-	API	-	-	API/ treat acne
152.	Dexamethasone Sodium	2392- 39-4	-	API	-	-	API/ treat conditions such as arthritis
153.	Rifampicin	13292 -46-1	-	API	-	-	API/prevent and treat tuberculosis and other infections
154.	N-Methylene-t-butylamine	109- 73-9	n-1	Intermed iate	RIFAMPIC IN	13292 -46-1	RIFAMPICIN/ prevent and treat tuberculosis and other infections
155.	Valsartan	13786 2-53-4	-	API	-	-	API/treat high blood pressure
156.	(Methyl N-valeryl-N-[(2- cyanobiphenyl-4- yl)methyl]-l-valinate)	48257 7-59-3	n-1	Intermed iate	Valsartan	13786 2-53-4	Valsartan/ treat high blood pressure
157.	Fluconazole	86386 -73-4	-	API	-	-	API/prevent and treat a variety of fungal and yeast infections.
158.	(2,4-Difluoro-2-(1h- 1,2,4- Triazole-1-YI) Acetophenone)	86404 -63-9	n-2	Intermed iate	Fluconazol e	86386 -73-4	Fluconazole/ prevent and treat a variety of fungal and yeast infections.
159.	1-[2-(2,4-di fluorophenyl)- 2,3-epoxypropyl]-1H- 1,2,4-Triazole	86386 -76	n-1	Intermed iate	Fluconazol e	86386 -73-4	Fluconazole/ prevent and treat a variety of fungal and yeast infections.
160.	Aripiprazole	12972 2-12-9	-	API	-	-	API/ treat certain mental/mood disorders
161.	7-Hydroxy-3,4-dihydro-1H quinolin- 2-one	20544 8-65-3	n-4	Intermed iate	Aripiprazol e	12972 2-12-9	Aripiprazole/ treat certain mental/mood disorders
162.	7-(4-Chloro-butoxy)-3,4-di hydro- 1H-quinolin-2-one	12972 2-34-5	n-3	Intermed iate	Aripiprazol e	12972 2-12-9	Aripiprazole/ treat certain mental/mood disorders
163.	1-(2,3-Dichloro-phenyl)-pi perazine Hydrchloride	11953 2-26-2	n-2	Intermed iate	Aripiprazol e	12972 2-12-9	Aripiprazole/ treat certain mental/mood disorders
164.	7-{4-[4-(2,3-Dichloro-phen yl)-piperazin-1-yl] -butoxy}-3,4-dihydro-1H-q uinolin-2-one	12972 2-25-4	n-1	Intermed iate	Aripiprazol e	12972 2-12-9	Aripiprazole/ treat certain mental/mood disorders
165.	Nebivolol Hydrochloride	15252 0-56-4	-	API	-	-	API/ treat high blood pressure.
166.	6-Fluoro-2-oxiranyl- chroman	99199 -90-3	n-3	Intermed iate	Nebivolol Hydrochlor ide	15252 0-56-4	Nebivolol Hydrochloride/ treat high blood pressure.
167.	2-Benzylamino-1-(6- fluoro-chroman -2-yl)- ethanol	13781 -67-4	n-2	Intermed iate	Nebivolol Hydrochlor ide	15252 0-56-4	Nebivolol Hydrochloride/ treat high blood pressure.
168.	2-{Benzyl-[2-(6-fluoro- chroman-2-yl) -2-hydroxy- ethyl]-amino}-1 -(6-fluoro- chroman-2-yl)-ethanol	929- 706- 85-4	n-1	Intermed iate	Nebivolol Hydrochlor ide	15252 0-56-4	Nebivolol Hydrochloride/ treat high blood pressure.
169.	Lopinavir	19272 5-17-0	-	API	-	-	API/treat human immunodeficiency virus (HIV) infection.
170.	1-Imino-4-(N,N- dibenzylamino) 5-phenyl- 3-oxo-pent-1-ene	15673 2-12-6	n-3	Intermed iate	Lopinavir	19272 5-17-0	Lopinavir/treat human immunodeficiency virus (HIV) infection.

	amino) -1,6-diphenyl hex- 4-en-3-one	2-13-7	n-2	Intermed iate	Lopinavir	19272 5-17-0	immunodeficiency virus (HIV) infection.
172.	(2S, 3S, 5S)-2-Amino-3- hydroxy-5- (1-tetra hydro pyrmid-2-onyl)-3- methyl butanoyl) amino-1,6- diphenyl	116- 63-2	n-1	Intermed iate	Lopinavir	19272 5-17-0	Lopinavir/treat human immunodeficiency virus (HIV) infection.
173.	Darunavir	20636 1-99-1	-	API	-	-	API/treat human immunodeficiency virus
174.	N-[2R,3S)-3-Tert butoxycrbonyl amino- 2- hydroxy-4-phenyl butyl]- isobutylamine	30296 4-08-5	n-2	Intermed iate	Darunavir	20636 1-99-1	Darunavir/treat human immunodeficiency virus
175.	N-[(2R,3S)-3-Tert butoxycarbonylamino-2- hydroxy-4-phenyl butyl]- isobutylamine	16023 2-08-6	n-1	Intermed iate	Darunavir	20636 1-99-1	Darunavir/treat human immunodeficiency virus
176.	Levetiracetam	10276 7-28-2	-	API	-	-	API/ treat seizures (epilepsy).
177.	N-(1-Carbamyl propyl)-4- chloro butyramide	10276 7-31-7	n-1	Intermed iate	Levetirace tam	10276 7-28-2	Levetiracetam/ treat seizures (epilepsy).
178.	Pregabalin	14855 3-50-8	-	API	-	-	API/ treat neuropathic pain and fibromyalgia.
179.	2-(3-Methyl-butylidene)- melonic acid diethyl ester	86369 -44-0	n-3	Intermed iate	Pregabalin	14855 3-50-8	Pregabalin/treat neuropathic pain and fibromyalgia.
180.	3-aminomethyl 5-methyl hexanoic acid	14855 3-50-8	n-2	Intermed iate	Pregabalin	14855 3-50-8	Pregabalin/treat neuropathic pain and fibromyalgia.
181.	s(+)Pregabalin mandalate salt	4118- 51-8	n-1	Intermed iate	Pregabalin	14855 3-50-8	Pregabalin/treat neuropathic pain and fibromyalgia.
182.	Atorvastatin calcium trihydrate	13452 3-03-8	-	API	-	-	API/ to reduce such risk even if your cholesterol levels are normal.
183.	[6-(2-Amino-ethyl)-2,2- dimethyl- [1,3]dioxan-4- yl]-acetic acid tert-butyl ester	125- 86-0	n-3	Intermed iate	Atorvastati n calcium trihydrate	13452 3-03-8	Atorvastatin calcium trihydrate/ to reduce such risk even if your cholesterol levels are normal.
184. ⁽	(6-{2-[2-(4-Fluoro-phenyl)- 5-isopropyl-3- phenyl-4- phenylcarbamoyl-pyrrol-1- yl]- ethyl}-2,2-dimethyl- [1,3]dioxan-4-yl)- acetic acid tert-butyl ester	26598 9-42-2	n-2	Intermed iate	Atorvastati n calcium trihydrate	13452 3-03-8	Atorvastatin calcium trihydrate/ to reduce such risk even if your cholesterol levels are normal.
185. [¢]	7-[2-(4-Fluoro-phenyl)-5- isopropyl-3-phenyl- 4- phenylcarbamoyl-pyrrol-1- yl]-3,5- dihydroxy- heptanoic acid tert-butyl ester	12597 1-95-1	n-1	Intermed iate	Atorvastati n calcium trihydrate	13452 3-03-8	Atorvastatin calcium trihydrate/ to reduce such risk even if your cholesterol levels are normal.
186.	Rosuvastatin Calcium	14709 8-20-2	-	API	-	-	API/help lower "bad" cholesterol

187.	N-[4-(4-Fluoro-phenyl)-5- formyl-6- isopropyl- pyrimidin-2-yl]-N-methyl - methanesulfonamide	29096 -933	n-4	Intermed iate	Rosuvasta tin Calcium	14709 8-20-2	Rosuvastatin Calcium/ help lower "bad" cholesterol
188.	3-(tert-Butyl-dimethyl- silanyloxy)-7-[4-(4-fluoro- phenyl)-6- isopropyl-2- (methanesulfonyl-methyl- amino) -pyrimidin-5-yl]-5- oxo-hept-6-enoic acid methyl ester	35580 6-00-7	n-3	Intermed iate	Rosuvasta tin Calcium	14709 8-20-2	Rosuvastatin Calcium/ help lower "bad" cholesterol
189.	7-[4-(4-Fluoro-phenyl)-6- isopropyl-2- (methanesulfonyl -methyl- amino)-pyrimidin-5-yl]-3- hydroxy -5-oxo-hept-6- enoic acid methyl ester	14711 8-39-6	n-2	Intermed iate	Rosuvasta tin Calcium	14709 8-20-2	Rosuvastatin Calcium/ help lower "bad" cholesterol
190.	7-[4-(4-Fluoro-phenyl)-6- isopropyl-2- (methanesulfonylmethyl- amino)-pyrimidin-5-yl]- 3,5-dihydroxyhept- 6- enoic acid methyl ester	14711 8-40-9	n-1	Intermed iate	Rosuvasta tin Calcium	14709 8-20-2	Rosuvastatin Calcium/ help lower "bad" cholesterol
191.	Hydroxychloroquine	118- 42-3	-	API	-	-	API/treat rheumatoid arthritis and systemic lupus erythematosus
192.	4, 7-Dichloroquinoline	86-98- 6	n-1	Intermed iate	Hydroxych Ioroquine	118- 42-3	Hydroxychloroquine/ treat rheumatoid arthritis and systemic lupus erythematosus
193.	Torsemide	56211 -40-6	-	API	-	-	API /Heart failure, liver disease, and kidney disease
194.	(2-aminobenzenesulfonic acid)	88-21- 1	n-3	Intermed iate			Torsomido /Hoart failuro
195.	(4-chloropyridine-3- sulfonamide)	18368 -64-4	n-2	Intermed iate	Torsemide	56211 -40-6	liver disease, and kidney
196.	(4-(m-tolylamino)pyridine- 3-sulfonamide)	72811 -73-5	n-1	Intermed iate			
197.	Amisulpride	53583 -79-2	-	API	-	-	API /Antipsychotic
198.	Irbesartan	13840 2-11-6	-	API	-	-	API /Antihypertensive
199.	(4'-(2-Butyl-4-oxo-1,3- diazaspiro[4,4]non-1-ene- 3-yl methyl)biphenyl-2- carbonitrile)	13840 1-24-8	n-2	Intermed iate		12940	Irbesartan /Blood
200.	(2-n-butyl-4-spiro cyclopenetrate-1-((2'- triphenyl methyl tetrazol- 5-yl) biphenyl-4-yl methyl)-2-imidazole)	12475 1-00-4	n-1	Intermed iate	Irbesartan	2-11-6	pressure,heart attacks, and kidney problems
201.	Flurbiprofen	510 4- 49-4	-	API	-	-	API /Painkiller
202.	Cloxacillin Sodium	7081- 44-9	-	API	-	-	API /Antibiotic

203.	Terbinafine Hydrochloride	78628	-	API	-	-	API /Antifungal
204.	Roxithromycin	80214	-	API	-	-	API /Antibiotic
205.	Lisinopril	83915 -83-7	-	API	-	-	API /Antihypertensive
206.	Hydrochlorothiazide	58-93- 5	-	API	-	-	API/Antihypertensive
207.	Atenolol	29122 -68-7	-	API	-	-	API /Antihypertensive
208.	Domperidone	57808 -66-9	-	API	-	-	API /Antiemetic
209.	Dabigatran etexilate mesylate	21191 5-06-9	-	API	-	-	API /prevent blood clots
210.	(3-(3-Amino-4- methylamino-benzoyl)- pyridine-2-yl-amino)- propionic acid ethyl ester) & ((4-Cyano- phenylamino)acetic acid)	42288 -26-6	n-4	Intermed iate			
211.	(3-({2-[(4-cyano- phenylamino)-methyl]-1- methyl-1H- benzoimidazole-5- carbonyl}-pyridine-2-yl- amino)-propionic acid ethyl ester methane sulfoate)	21191 5-84-3	n-3	Intermed iate			
212.	(3-({2-[(4-carbamimidoyl- phenylamino)-methyl]-1- methyl-1H- benzoimidazole-5- carbonyl}-pyridine-2-yl- amino)-propionic acid ethyl ester hydrogen chloride)	7647- 01-0	n-2	Intermed iate	Dabigatra n etexilate mesylate	21191 5-06-9	Dabigatran /prevent blood clots
213.	(3-[(2-{[4- (Hexyloxycarbonylamino- imino-methyl)- phenylamino)-methyl}-1- methyl-1H- benzoimidazole-5- carbonyl)-pyridine-2-yl- amino]-propionic acid ethyl ester)	21191 5-06-9	n-1	Intermed iate			
214.	Strontium Renelate	13545 9-90-4	-	API	-	-	API /Osteoporosis
215.	(Diethyl 3- oxopentanedioate)	105- 50-0	n-3	Intermed iate			
216.	(Ethyl 5-amino-4-cyano-3- (2-ethoxy-2- oxoethyl)thiophene-2- carboxylate)	58168 -20-0	n-2	Intermed iate	Strontium Renelate	13545 9-90-4	Strontium Renelate /postmenopausal women with osteoporosis

217.	(diethyl 2,2'-((3-cyano-4- (2-ethoxy-2-oxoethyl)-5- (ethoxycarbonyl) thiophen-2- yl)azanediyl)diacetate)	58194 -26-6	n-1	Intermed iate			
218.	Phenylephirine HCI	61-76- 7	-	API	-	-	API /stuffy nose, sinus, and ear symptoms
219.	(3-acetylphenyl acetate)	2454- 35-5	n-3	Intermed iate			
220.	(3-(2-bromoacetyl)phenyl acetate or 2- (benzyl(methyl)amino-1- (3-hydroxyphenyl)ethane- 1-one)	38396 -89-3 & 71786 -67-9	n-2	Intermed iate	Phenyleph irine HCl	61-76- 7	Phenylepherine HCl /stuffy nose, sinus, and ear symptoms
221.	(3-(1-hydroxy-2- (methylamino)ethyl)pheno l)	532- 38-7	n-1	Intermed iate			
222.	Cetrizine Dihydrochloride	83881 -52-1	-	API	-	-	API /Relieve allergy symptoms such as watery eyes, runny nose, itching eyes/nose, sneezing, hives, and itching
223.	4-chloro benzhydryl piperazine ethanol	10980 6-71-5	n-1	Intermed iate	Cetrizine Dihydrochl oride	83881 -52-1	Cetrizine Dihydrochloride /Relieve allergy symptoms such as watery eyes, runny nose, itching eyes/nose, sneezing, hives, and itching
224.	Itopride Hydrochloride	12289 2-31-3	-	API	-	-	API /Gastrointestinal symptoms of functional, nonulcer dyspepsia (chronic gastritis)
225.	Rabeprazole Sodium	11797 6-90-6	-	API	-	-	API /Gastroesophageal reflux disease (GERD)
226.	(2-[4-(3-methoxy- propoxy)-3-methyl- pyridin-2- yimethanesulfinyl]-1H- benzomidazole)	11797 7-21-6	n-1	Intermed iate	Rabepraz ole Sodium	11797 6-90-6	Rabeprazole Sodium/gastroesophageal reflux disease (GERD), duodenal ulcers
227.	Donepezil Hydrochloride	12001 1-70-3	-	API	-	-	API /Antidepressant
228.	Celecoxib	16959 0-42-5	-	API	-	-	API /pain or inflammation
229.	(4,4,4-trifluoro-1-(4-methyl phenyl) butano-1,3-diono)	720- 94-5	n-1	Intermed iate	Celecoxib	16959 0-42-5	Celecoxib/pain or inflammation
230.	Pantoprazole Sodium	13878 6-67-1	-	API	-	-	API /stomach and esophagus problems
231.	(5-Difluoromethoxy-2- (3,4-dimethoxy-pyridin-2- yimethylsulfanyl)-1H- benzoimidazole)	10262 5-64-9	n-1	Intermed iate	Pantopraz ole Sodium	13878 6-67-1	Pantoprazole Sodium /stomach and esophagus problems
232.	Artemether	71963 -77-4	-	API	-	-	API /Antimalerial

233.	Ampicillin Trihydrate	7177- 48-2	-	API	-	-	API /Antibiotic
234.	Levosulpiride	23672 -07-3	-	API	-	-	API /symptoms of schizophrenia, anxiety disorders, and dysthymia
235.	(2-methoxybenzoic acid)	579- 75-9	n-4	Intermed iate			
236.	(2-methoxy-5- sulfamoylbenzoic acid)	22117 -85-7	n-3	Intermed iate	Levosulpiri	23672	Levosulpiride /symptoms
237.	(Methyl 1,2-methoxy-5- sulfamoylbenzolate)	33045 -52-2	n-2	Intermed iate	de	-07-3	disorders, and dysthymia
238.	S-1-Ethyl-2-aminomethyl pyrolindine	22795 -99-9	n-1	Intermed iate			
239.	Moxifloxacin HCI	18682 6-86-8	-	API	-	-	API /Antibiotic
240.	(5,8-dihydronaphthalen-1- yl acetate)	51927 -56-1	n-1	Intermed iate	Moxifloxac in HCl	18682 6-86-8	Moxifloxacin/ Antibiotic
241.	Clotrimazole	23593 -75-1	-	API	-	-	API /Antifungal
242.	Famotidine	76824 -35-6	-	API	-	-	API/ used to treat ulcers of the stomach and intestines
243.	Amlodipine maleate	11852 46-15- 4	-	API	-	-	API/to prevent certain types of chest pain (angina).
244.	Bisacodyl	603- 50-9	-	API	-	-	API/stimulant laxatives
245.	Doxofylline	69975 -86-6	-	API	-	-	API/treatment of asthma
246.	Diprofyllin	479- 18-5	n-2	Intermed iate	Doxofyllin	69975	Doxofylline/ treatment of
247.	Theophylline-7-acetal	5614- 53-9	n-1	Intermed iate	е	-86-6	asthma
248.	Esomeprazole Magnesium	16197 3-10-0	-	API	-	-	API/ to treat certain stomach and esophagus problems
249.	Ivabradine Hydrochloride	14884 9-67-6	-	API	-	-	API/ to treat heart failure
250.	Etoricoxib	20240 9-33-4	-	API	-	-	API/Pain killers
251.	Omeprazole Magnesium	95382 -33-5	-	API	-	-	API/ to treat certain stomach and esophagus problems
252.	Amlodipine Besylate	88150 -42-9	-	API	-	-	API/ treatment of chronic stable angina
253.	Prasugrel	15032 2-43-3	-	API	-	-	API/Antiplatelet
254.	5-[a-cyclopropyl carbonyl- 2-fluoro benzyle)-2-nitro- 4,5,6,7- tetrahydrothieno[3,2- c]pyridine HCl		n-2	Intermed iate	Prasugrel	15032 2-43-3	Prasugrel/ Antiplatelet

255.	2-amino-5(-[α-cyclopropyl carbonyl-2-fluoro benzyl)- 4,5,6,7- tetrahydrothieno[3,2- c]pyridine HCl		n-1	Intermed iate			
256.	Nicorandil	65141 -46-0	-	API	-	-	API/ treatment of chronic stable angina pectoris
257.	N-(2- Hydroxyethyl)pyridine-3- carboxamide	6265- 73-2	n-1	Intermed iate	Nicorandil	65141 -46-0	Nicorandil/ treatment of chronic stable angina pectoris
258.	Cilansetron	12063 5-74-7	-	API	-	-	API/ treatment of diarrhoea-predominant irritable bowel syndrome (IBS)
259.	Sitagliptine	48646 0-32-6	-	API	-	-	API/ to control high blood sugar
260.	Tiotropium Bromide	18669 1-13-4	-	API	-	-	API/ to control and prevent symptoms caused by ongoing lung disease
261.	Silodosin	16097 0-54-7	-	API	-	-	API/ to treat signs and symptoms of an enlarged prostate gland
262.	Solifenacin	24247 8-38-2	-	API	-	-	API/to treat an overactive bladder.
263.	Hydroxy Chloroquine Sulfate	747- 36-4	-	API	-	-	API/ to prevent and treat malaria & treatment of rheumatoid arthritis, lupus, and porphyria cutaneatarda.
264.	Febuxosate	14406 0-53-7	-	API	-	-	API/ to prevent gout attacks by reducing the levels of uric acid in your blood
265.	Lornoxicam	70374 -39-9	-	API	-	-	API/nonsteroidal anti- inflammatory drug
266.	5-chloro-3-(chlorosulfonyl) thiophene-2- methylcarboxylate	70374 -37-7	n-4	Intermed iate			
267.	5 - Chloro-3-[[(methoxy carbonyl) amino] sulfonyl] -2- thiophene carboxylic acid methyl ester	70374 -38-8	n-3	Intermed iate			
268.	6-chloro-4-hydroxy-2H- thieno[2,3-e]-1,2-thiazine- 3-carboxylic acidmethylester1,1,- dioxide	70415 -50-8	n-2	Intermed iate	Lornoxica m	70374 -39-9	Lornoxicam/ nonsteroidal anti-inflammatory drug
269.	6-chloro-4-hydroxy-2- methyl-2H-thieno[2,3-e]- 1,2-thiazine-3-carboxylic acidmethylester1,1,- dioxide	70415 -50-8	n-1	Intermed iate			
• Tr	ne project falls under Catego	ory B2 of	projec	t activity 5(f) as per the s	schedule	of EIA Notification 2006 and

- The proposal was considered in the meeting dated 15.07.2021.
- During the meeting dated 15.07.2021, the project was appraised based on the information furnished in Form 1, Pre-Feasibility Report, Environment Management Plan and details submitted by e-mail.
- Project proponent (PP) and technical expert of PP, M/s. Envycraft Environmental Services remains present during video conference meeting.
- This is Greenfield project for manufacturing of synthetic organic chemicals [API] at Survey/Block No. 167 (Old Survey/Block No. 110), Village: Vav,Tal: Vagra, Dist: Bharuch-392165, outside notified area. Product profile with its end-use is discussed in depth. Committee noted that PP has addressed proposed Located in Vav Village (Non-Agriculture land) outside of GIDC and there are no water bodies, natural drain, National monuments, residential habitat etc. within 500 m radius from the project boundary. There are no Eco sensitive zones, wild life sanctuaries within the 10 km area from the boundary of the project site.
- Committee noted the following:
 - > Product profile with specific End-use of each product. At a time, 3-4 products can be manufactured.
 - Source of water is private tanker.
 - Unit had proposed segregation of effluent stream proposal and high COD stream from process will be passed through solvent stripper and treated high COD stream along with low COD stream will be treated in ETP and treated effluent will be sent to CMEE of M/s. BEIL for evaporation.
 - Natural gas or bio coal is proposed as fuel in boilers and TFH. Separate APCM like MCS, Bag filter proposed for boiler and TFH.
 - > Two stage scrubber proposed for each process stack.
 - PP submitted hazardous waste matrix mentioning source of generation, quantity and Mode of disposal and committed to comply the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
 - > Greenbelt development plan with 4620 Sq m (33%) of plot area.
 - > OHC with 20 Sq m area.
- Committee deliberated on Product profile, Layout plan, Storage details, Process safety, Fire safety, water balance & waste water management, Flue gas and process gas emission & Air Pollution Control System, Hazardous waste matrix, EMP, CER, Green belt, etc.
- Since, the unit falls in B2 category as per the MoEF&CC's amended EIA Notification vide S.O. 1223(E) dated 27.03.2020, the public consultation is not applicable as per paragraph 7(i) III (i) (e) of the Environment Impact Assessment Notification-2006.
- Looking to NaCN usage and storage as raw material for proposed project, Committee insisted for treatment
 of cyanide stream effluent, technical expert of PP could not addressed treatment of cyanide stream in water
 balance diagram.
- After detailed discussion, Committee unanimously decided to consider the project in one of upcoming meeting after submission of following documents:

1. Submission of details regarding cyanide stream generation from each product source, from where

cyanide stream generated and its adequate treatment at source before sending cyanide stream to ETP for proposed project for further treatment.

- PP submitted their reply for the query raised by SEAC during SEAC meeting dated 15.07.2021 through email.
- The proposal was reconsidered in the SEAC video conference meeting dated **05.08.2021**.

 PP submitted revised product profile as above and revised Salient features of the project including Water, Air and Hazardous waste management are as under:

Sr.	Parti	culars				Details	
A-1	Tota (Rs.	l cost of Propo in Crores): 7.	osed Project otal Project 1Crores				
	Brea	k-up of propose Detai	ed project Cost: Is	Pro (Rs.	ject Cost In Crores)		
		Land Build Plant	ing &Machinery	1.80 1.50 2.10)		
A 0	Data		, mantal Managaman	1.70		Ashala	
<u> </u>	Sr N o	Unit	Detail	Capital Cost (Rs. In Lakhs)	Operating Cost/ Month (Rs. In Lakhs)	Maintena nce Cost / Month (Rs. In Lakhs)	w. Total Recurrir g Cost / Month (Rs. In Lakhs)
			PrimaryETP& Stripper	42.50	7.0	1.00	8.00
	1	Waste Water	Common Evaporation facility	1.00	37.8	-	37.8
	2	Air & LDAR	Scrubber, MCS, Bag Filter & Water Scrubber	34.00	0.85	0.43	1.28
	3	Hazardous Management	Membership & Disposal + Incineration	1.00	7.3	-	7.3
			Transportation	-	0.1	-	0.1
			Fire Hydrant & pipeline System	25.0	0.24	0.12	0.36
			Trailer Driven pump (6000 LPM)	4.0	0.05	0.1	0.15
	4	Fire & Safety	Safety equipment/PPES	6.0	0.06	0.03	0.09
			Fire Extinguisher & Foam Trolley	5.0	0.04	0.02	0.06
			Integrated DCS	20.00	1.00	0.02	1.02

			Flame Proof Electric Fitting	7.0	C).25	0.05	0.30
	5	AWH Monitoring	In House Monitoring	2.0	C	0.10	0.05	0.15
	6	Green Belt Developmen	Trees	3.3	C).33	0.17	0.50
	7	Occupationa Health	I OHC, Training & Medical Checkup	2.00	C).10	0.20	0.30
	8	CER Activities	2% as per OM dated 01/05/2018	14.5	0	.071	0.047	0.118
		т	otal	167.3 ~170.0				57.528
	Sum	marv						
		Cost of I	Project in Crores			7.10Ci	ores	
		EMP Ca	pital Cost in Crores			1.673	Crores	
		EMP Re	curring Cost in Crore	es		6.90 C	rores	
A-3	Deta	ils of CER	as per OM dated	01/05/2018	3 (In	case	of project	falls unde
	CPA	/SPA, CER fu	nd allocation to be a	at least 1.5 t	imes	the slab	s given in th	e OM date
	01.0	5.2018 for SP	A and 2 times for CF	PA in case o	f Env	rironmen	tal Clearanc	e as per th
	mec	nanism publisl	ned vide MoEF&CC'	<u>s OM vide</u> 3	<u>1.10</u> .	<u>201</u> 9.)		-
		9	6 as per the OM	Rs. in Lacs				
		2	%	14.5				
	Brief	note on propo	sed activities:					
			Activities			Pha	ıse Wise Bı (Rs. In Lakl	udget h)
		(On bas	is of Needs Assess	sment)		1st	2nd	Total
						Year	Year	Total
	Heal •	th- Provide Aml	oulance with media	cal equipme	ent	8.0	-	8.00
		(NO.1) = VIIId	ye. vav					
	•	Drinking Water (I X 1 Nos.) (R Village- Vac Rain water re	er Facility RO Sys s. lakh 3.5 + 0.7 re ladla echarge (percolate	tem (35 KL curring) d borewell	.D -2	3.25	3.25	6.50
		Nos.) (Rs. la Galenda & V	kh 1.5 + 0.35 recu /adadla	urring each))-	Appre		1 50 L akb
		10121 003	L			Арріс		
В	Land Non	d / Plot owner Agriculture La	ship details: nd (M/s. Nishal Ente	erprises Pvt	Ltd)			
	Plot	area	· · · · · · · · · · · · · · · · · · ·	·				
B-1	1		Total Plot are	а				
B-1		l						
B-1			14000.00Sq. r	n.				
B-1	Briof		14000.00Sq. r	n.	roied	t activitio	.e.	
B-1 B-2	Brief	note on Area	14000.00Sq. r adequacy in line to vill store its raw mate	n. proposed p	roject	t activitie	S:	aw Materia
B-1 B-2	Brief	note on Area Company v	14000.00Sq. r adequacy in line to vill store its raw mate	n. proposed p erial in Drum these rawm	roject s &Ta	t activitie anks (W	s: e procure Ra	aw Material

	\succ	List of Hazardous chemic	cals stored in t	anks snown	Delow.	
	S.N	Name of chemical	Quantit (Nos.)	ty Tota (Nos	al Tot 5.) S	al Qty. to k store (KL)
			NON -PESO	<u>– 5 Nos.</u>		40.14
	1	Sulphuric Acid	5 KL	1 No	IS.	10 KL
	2	Hydrochloric Acid	15 KL	1 NC	S.	15 KL
	3	Nitric Acid	5 KL	1 NC	IS.	5 KL
	4	Liq. Ammonia	15 KL	1 No	S.	15 KL
	5	Caustic	10 KL	1 No	S.	10 KL
		1	PESO – 8	Nos.		
	1	IPA	15 KL	1 No	S.	15 KL
	2	Methanol	15 KL	1 No	S.	15 KL
	3	Methanol	20 KL	1 No	S.	20 KL
	4	Toluene	20 KL	1 No	S.	20 KL
	5	Cyclohexane	15 KL	1 No	S.	15 KL
	6		15 KL	1 No	S.	15 KL
	7	Einyi Acetate	20 KL	1 No	S.	20 KL
	8	Acetone	15 KL	1 No	S.	15 KL
	-		H2-Ba	nk	-	
	1	Hydrogen	2.2 kg X Nos.	60 1 No	s.	0.14
		House. Company has provided 3	0 m² for stora	ge fuel & 30	m² flv ash st	orage area
		ash will be collect, stored 1505.00 m ² (G+2) area products.	l in hazardous will be provide	area). ed for the ma	anufacturing	of the pro
S	> Sr. Io.	ash will be collect, stored 1505.00 m² (G+2) area products. Particulars	l in hazardous will be provide Criteria for Storage	area). ed for the ma Inventory Required (MT)(KL)	anufacturing Area Required m ²	of the pro Area Propos ed m ²
S No	> 6r. 10.	ash will be collect, stored 1505.00 m² (G+2) area products. Particulars Finished product storage area (2 week inventory)	l in hazardous will be provide Criteria for Storage (Max. 250 Drum) 0.3 MT/ 1m ²	area). ed for the ma Inventory Required (MT)(KL) 50.00	Area Required m ² 400.00	of the pro Area Propos ed m ² 700.0
S No	> 6r. 10.	ash will be collect, stored 1505.00 m² (G+2) area products. Particulars Finished product storage area (2 week inventory) Raw Material Store area (G+2) (2 week inventory)	l in hazardous will be provide Criteria for Storage (Max. 250 Drum) 0.3 MT/ 1m ² 0.3 MT/ 1m ²	area). ed for the ma Inventory Required (MT)(KL) 50.00 200.00	Area Required m ² 400.00	of the pro Area Propos ed m ² 700.0
S N 1	> Sr. Io. 1 2 3	ash will be collect, stored 1505.00 m² (G+2) area products. Particulars Finished product storage area (2 week inventory) Raw Material Store area (G+2) (2 week inventory) Drum Storage Area (Storage at a time)	l in hazardous will be provide Criteria for Storage (Max. 250 Drum) 0.3 MT/ 1m ² 0.3 MT/ 1m ² Max. 200 Drum (0.3 MT/ 1m ²)	area). ed for the ma Inventory Required (MT)(KL) 50.00 200.00 40.00	Area Required m ² 400.00 1000.00 150.00	of the pro Area Propos ed m ² 700.0 2205.0 300.0
	> io. 1 2 3 4	ash will be collect, stored 1505.00 m² (G+2) area products. Particulars Finished product storage area (2 week inventory) Raw Material Store area (G+2) (2 week inventory) Drum Storage Area (Storage at a time) Petroleum Storage Area (PESO) (Storage at a time)	l in hazardous will be provide Criteria for Storage (Max. 250 Drum) 0.3 MT/ 1m ² 0.3 MT/ 1m ² Max. 200 Drum (0.3 MT/ 1m ²) 15 KL X 5 20 KL X 3	area). ed for the ma Inventory Required (MT)(KL) 50.00 200.00 40.00 135.00	Area Required m ² 400.00 1000.00 150.00 400.00	of the pro Area Propos ed m ² 700.0 2205.0 300.0 700.0
S N 1 2 3	> Sr. Io. 1 2 3 4 5	ash will be collect, stored 1505.00 m² (G+2) area products. Particulars Finished product storage area (2 week inventory) Raw Material Store area (G+2) (2 week inventory) Drum Storage Area (Storage at a time) Petroleum Storage Area (PESO) (Storage at a time) Tank farm Area (Non- PESO) (Storage at a time)	l in hazardous will be provide Criteria for Storage (Max. 250 Drum) 0.3 MT/ 1m ² 0.3 MT/ 1m ² Max. 200 Drum (0.3 MT/ 1m ²) 15 KL X 5 20 KL X 3 5 KL X 2 10 KL X 1 15 KL X 2	area). ed for the ma Inventory Required (MT)(KL) 50.00 200.00 40.00 135.00 50.00	anufacturing Area Required m ² 400.00 1000.00 150.00 400.00 300.00	of the pro Area Propos ed m ² 700.0 2205.0 300.0 700.0
S No 2 2 5 6	> Sr. Io. 1 2 3 4 5 6	ash will be collect, stored 1505.00 m² (G+2) area products. Particulars Finished product storage area (2 week inventory) Raw Material Store area (G+2) (2 week inventory) Drum Storage Area (Storage at a time) Petroleum Storage Area (PESO) (Storage at a time) Tank farm Area (Non- PESO) (Storage at a time) Cylinder Storage Area (HCI, NH3 & Nitrogen gas) (Storage at a time)	l in hazardous will be provide Criteria for Storage (Max. 250 Drum) 0.3 MT/ 1m ² 0.3 MT/ 1m ² Max. 200 Drum (0.3 MT/ 1m ²) 15 KL X 5 20 KL X 3 5 KL X 2 10 KL X 1 15 KL X 2	area). ed for the ma Inventory Required (MT)(KL) 50.00 200.00 40.00 135.00 50.00	Area Required m ² 400.00 1000.00 150.00 400.00 300.00 50.00	of the proposed Proposed m ² 700.0 2205.0 300.0 700.0 700.0 100.0
	> Sr. Io. 1 2 3 4 5 6 7	ash will be collect, stored 1505.00 m² (G+2) area products. Particulars Finished product storage area (2 week inventory) Raw Material Store area (G+2) (2 week inventory) Drum Storage Area (Storage at a time) Petroleum Storage Area (PESO) (Storage at a time) Tank farm Area (Non- PESO) (Storage at a time) Tank farm Area (Non- PESO) (Storage at a time) Cylinder Storage Area (HCI, NH3 & Nitrogen gas) (Storage at a time) Tonner Storage Area	I in hazardous will be provide Criteria for Storage (Max. 250 Drum) 0.3 MT/ 1m ² 0.3 MT/ 1m ² Max. 200 Drum (0.3 MT/ 1m ²) 15 KL X 5 20 KL X 3 5 KL X 2 10 KL X 1 15 KL X 2 10 KL X 1 15 KL X 2	area). ed for the main Inventory Required (MT)(KL) 50.00 200.00 40.00 135.00 50.00 100 0.9	Area Required m ² 400.00 1000.00 150.00 300.00 50.00 50.00	of the pro Area Propos ed m ² 700.0 2205.0 300.0 700.0 700.0 100.0

		Cylinder) are	ea	gas			
	9	Hazardous Wa Storage Are (90 Day Invent	aste ea tory)	- 725 (Fly	5&115 ⁄ Ash)	840.00	1400.0
				131	7.04M T	3190 m ²	6237 m ²
	~	Hence, adequate mfg. Facility.	e area is ava	ilable for pro	posed I	Bulk drug&	its intermedia
B-3	Green	n belt area					
				()	Total	or)	
	Are	ea in So. meter	Δ	620.0 Sa m (33 % of	total nlot a	rea)
			-		ant prei	nises	. suj
	% of	total area			33%		
0							
C	Emplo	oyment generatio	n	Total			
				35 Employees			
			Direc	ct = 15 Employ	/ees		
			Indire	ct = 20 Emplo	yees		
	14/ 4	-D					
ט D-1		R Ce of Water Supply	v				
	(GIDC	C. Bore well. Surfac	y ce water. Tan	ker supply etc)		
	•	Private tanker			,		
	Status	of permission fror	n the concerr	n authority.			
	Status •	s of permission from Will be obtain	n the concerr	n authority.			
D-2	Status • Water	of permission from Will be obtain consumption (Kl	n the concerr L D)	n authority.			
D-2	Status • Water	of permission from Will be obtain consumption (Ki	n the concerr L D)	n authority.			
D-2	Status • Water	of permission from Will be obtain consumption (Ki	n the concerr LD) Wat	ter Consumpt	ion		
D-2	Status • Water Sr. No.	Category	n the concerr LD) Wat	ter Consumpt (KL/Day)	ion Fres		Remarks
D-2	Status • Water Sr. No.	Category	n the concerr LD) Wat Total Water	ter Consumpt (KL/Day) Recycled	ion Fres Wate	h Pr	Remarks
D-2	Status • Water Sr. No. 1.	Category	n the concerr LD) Wat Total Water 1.50	ter Consumpt (KL/Day) Recycled	ion Fres Wate 1.50	h Pr	Remarks
D-2	Status • Water Sr. No. 1. 2.	Category Domestic Gardening	n the concern LD) Wat Total Water 1.50 10.50	ter Consumpt (KL/Day) Recycled	ion Fres Wate 1.50 10.5	h F er 0 Pri	Remarks vate tanker
D-2	Status • Water Sr. No. 1. 2. 3.	Category Domestic Gardening Industrial	n the concerr LD) Water 1.50 10.50	ter Consumpt (KL/Day) Recycled -	ion Fres Wate 1.50 10.5	h F er 0 Pri	Remarks
D-2	Status • Water Sr. No. 1. 2. 3.	Category Domestic Gardening Industrial Process	n the concern	ter Consumpt (KL/Day) Recycled - -	ion Fres Wate 1.50 10.5 32.0	h f f f f f f f f	Remarks vate tanker Omeprazole agnesium
D-2	Status • Water Sr. No. 1. 2. 3.	Category Domestic Gardening Industrial Process Boiler	n the concern	authority.	ion Fres Wate 1.50 10.5 32.0 10.0	h F er 0 Primo 0 WC: 0 MC: 0 MC: 0 Reco 0 Reco Mak	Remarks vate tanker Omeprazole agnesium otal Water ement: 48 KLD ondensate very: 38 KLD se up Water: 10KLD
D-2	Status • Water Sr. No. 1. 2. 3.	Category Domestic Gardening Industrial Process Boiler Cooling	n the concern	ter Consumpt (KL/Day) Recycled - - 38.00	ion Fres Wate 1.50 10.5 32.0 10.0	h er 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Remarks vate tanker Omeprazole agnesium otal Water ement: 48 KLD ondensate very: 38 KLD se up Water: 10KLD
D-2	Status • Water Sr. No. 1. 2. 3.	Category Domestic Gardening Industrial Process Boiler Cooling Washing	n the concern	authority.	ion Fres Wate 1.50 10.5 32.0 10.0 14.0 1.50	h br 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Remarks vate tanker Omeprazole agnesium otal Water ement: 48 KLD ondensate very: 38 KLD te up Water: 10KLD
D-2	Status • Water Sr. No. 1. 2. 3.	Category Category Domestic Gardening Industrial Process Boiler Cooling Washing Scrubbing	n the concern	authority.	ion Fres Wate 1.50 10.5 32.0 10.0 14.0 1.50 4.00	h F h Priv 0 Priv 0 WC: 0 MC: 0 MC: 0 MA 0 CO 0 Reco Mak 0 D 0 D 0 Reco 0 Mak 0 D 0 Reco 0 Mak	Remarks vate tanker Omeprazole agnesium otal Water ement: 48 KLD ondensate very: 38 KLD te up Water: 10KLD er & Cooling down will be euse after utralization.
D-2	Status • Water Sr. No. 1. 2. 3.	Category Category Domestic Gardening Industrial Process Boiler Cooling Washing Scrubbing Total Industrial	n the concern	authority. ter Consumpt (KL/Day) Recycled - - - 38.00 - 2.00 40.00	ion Fres Wate 1.50 10.5 32.0 10.0 14.00 1.50 4.00	h F pr 0 Priv 0 WC: 0 WC: 0 MC: 0 MC: 0 MA 0 CO 0 Reco Mak 0 D 0 Boild 0 blow re 0 Reco	Remarks vate tanker Omeprazole agnesium otal Water ement: 48 KLD ondensate very: 38 KLD

	S.N	of which Water (Worst Case Sce Product N	Consumptio <u>enario;</u> Name	Wa	Proces Iter re I MT p	eq. (in KL)	2 KLD. Total Productio n (MT/Month) Total water req. (KLD)
	1.	Omeprazole M	agnesium		9.5	2 KL	100	31.75 KLD
				Hen	ce Wo	orst Case C	onsidered is	s 31.75 ~ 32 KLD
	- Sur	nmary of water rec	quirement	Quan KLD	tity	Remarks		
	Tot the	al water requiren project (A)	nent for	113.5	0	-		
	Qua reu	antity to be recycl e sed (B)	ed /	40.00		38.00 KL Condens 2.0 KLD & Cooling	D Recycled ate Recover Reused (Bo g waste wate	(Boiler ry) iler blow down er)
	Tota (C)	al fresh water req	uirement	73.50		Source: Authority	GIDC Wate	r Supply
	Reuse	A = B + C Recycle details	(KLD) with	feasib	oility.			
	Reuse [Sourc w in w	A = B + C /Recycle details ce of reuse & app ource of waste vater for reuse A KLD (From here it is oming)	(KLD) with lication ar Applicati area with quantity KLD (Wh is used)	n feasib rea] ion n in in iere it	oility. Cha was reus TDS	racteristic ste water t sed (COD, S etc.)	cs of o be BOD,	Remarks regarding feasibility to reuse
	Reuse [Source w in w co (3	A = B + C /Recycle details ce of reuse & app ource of waste ater for reuse there it is oming) oiler Condensate 88.00 KLD)	(KLD) with lication ar Applicati area with quantity KLD (Wh is used) Boild (38.00 b	n feasib rea] ion in in ere it er <ld)< th=""><th>Cha was reus TDS</th><th>pH: 7.5- TDS: <200 BOD: B COD: B</th><th>cs of o be BOD, 8.0) mg/l DL DL</th><th>Remarks regarding feasibility to reuse</th></ld)<>	Cha was reus TDS	pH: 7.5- TDS: <200 BOD: B COD: B	cs of o be BOD, 8.0) mg/l DL DL	Remarks regarding feasibility to reuse
	Reuse [Source S w in w c B (3 B (3 B (3 C W 1.	A = B + C /Recycle details ce of reuse & app ource of waste ater for reuse A KLD (From there it is oming) oiler Condensate 38.00 KLD) oiler Blowdown .6 KLD ooling Waste ater .4 KLD	(KLD) with lication ar Applicati area with quantity KLD (Wh is used) (38.00 f (38.00 f (2.0 K)	in feasib ion in in inere it er <ld) ber LD)</ld) 	Cha was reus TDS	pH: 7.5- TDS: <200 BOD: B COD: B DH: 6.0- TSS: < 77 TDS: <250 BOD: <14 COD: <43	25 of o be BOD, 8.0 0 mg/l DL 8.0 7 mg/l 0 mg/l 0 mg/l 6 mg/l	Remarks regarding feasibility to reuse Yes, it is feasible.
	Reuse [Source S W in W C B (3 B (3 C W 1. C W 1. In cas no reu	A = B + C /Recycle details ce of reuse & app ource of waste ater for reuse A KLD (From there it is oming) oiler Condensate 88.00 KLD) oiler Blowdown .6 KLD ooling Waste ater .4 KLD e of no reuse/rec use/recycle.	(KLD) with lication ar Applicati area with quantity KLD (Wh is used) (38.00 H (38.00 H (2.0 K) (2.0 K)	a feasib rea] ion in here it er ≺LD) ber LD)	oility. Cha was reus TDS	racteristic ste water t sed (COD, 5 etc.) pH: 7.5- TDS: <200 BOD: B COD: B pH: 6.0- TSS: < 77 TDS: <250 BOD: <14 COD: <43 Give brief	s of o be BOD, 8.0 0 mg/l DL DL 8.0 7 mg/l 0 mg/l 0 mg/l 3 mg/l 3 mg/l note on jus	Remarks regarding feasibility to reuse Yes, it is feasible.
D-3	Reuse [Source W in W C B (3 B (3 B (3 C W 1. C W 1. C W aste	A = B + C /Recycle details ce of reuse & app ource of waste ater for reuse A KLD (From there it is oming) oiler Condensate 88.00 KLD) oiler Blowdown .6 KLD ooling Waste ater .4 KLD e of no reuse/rec ise/recycle.	(KLD) with lication ar Applicati area with quantity KLD (Wh is used) Boild (38.00 H (2.0 Kh cycle of wa	teasib ion in in ere it <ld) ber LD)</ld) 	oility. Cha was reus TDS	racteristic ste water t sed (COD, 5 etc.) pH: 7.5- TDS: <200 BOD: B COD: B pH: 6.0- TSS: < 77 TDS: <250 BOD: <14 COD: <43 Give brief	s of o be BOD, 8.0) mg/l DL 2.0 ' mg/l 3.0 ' mg/l '	Remarks regarding feasibility to reuse Yes, it is feasible.
D-3	Reuse [Source S W In B (3 B (3 B 0. C W 1. C W 1. Th cas no reu - Waste	A = B + C /Recycle details ce of reuse & app ource of waste ater for reuse A KLD (From there it is oming) oiler Condensate 88.00 KLD) oiler Blowdown .6 KLD ooling Waste ater .4 KLD e of no reuse/rec ise/recycle. water generation Category	(KLD) with lication ar Applicati area with quantity KLD (Wh is used) (38.00 H (38.00 H (38.00 H (2.0 Kl cycle of wa	teasib ion in here it cr (LD) ber LD) aste wa	oility. Cha was reus TDS tewat	racteristic ste water to sed (COD, 5 etc.) pH: 7.5- TDS: <200 BOD: B DH: 6.0- TSS: < 77 TDS: <250 BOD: <14 COD: <43 Give brief	s of o be BOD, 8.0) mg/l DL 8.0 ' mg/l 0 mg/l 0 mg/l 3 mg/l note on jus	Remarks regarding feasibility to reuse Yes, it is feasible. stification as v
D-3	Reuse [Source w in w co B (3 B (3 B (3 B (3 C w 1. In cas no reu - Waste	A = B + C /Recycle details <u>ce of reuse & app</u> ource of waste ater for reuse A KLD (From there it is oming) oiler Condensate 88.00 KLD) oiler Blowdown .6 KLD ooling Waste ater .4 KLD e of no reuse/rec ise/recycle. water generation Category Domestic	(KLD) with lication ar Applicati area with quantity KLD (Wh is used) (38.00 H (38.00 H (38.00 H (2.0 K) (2.0 K) (2.0 K) (2.0 K) (2.0 K)	teasib ion in here it cr (LD) ber LD) aste wa Wast eneration 1	oility. Cha was reus TDS tewat on(Kl .20	racteristic ste water t sed (COD, 5 etc.) pH: 7.5- TDS: <200 BOD: B COD: B pH: 6.0- TSS: < 77 TDS: <250 BOD: <14 COD: <43 Give brief	s of o be BOD, 8.0 0 mg/l DL DL 8.0 7 mg/l 0 mg/l 0 mg/l 6 mg/l note on jus Re treate	Remarks regarding feasibility to reuse Yes, it is feasible. stification as v emarks ed in ETP
)-3	Reuse [Source w in w co B (3 B (3 B (3 B (3 C W 1. Th cas no reu - Waste	A = B + C /Recycle details ce of reuse & app ource of waste rater for reuse A KLD (From there it is oming) oiler Condensate 88.00 KLD) oiler Blowdown 6 KLD ooling Waste ater 4 KLD e of no reuse/rec ise/recycle. water generation Category Domestic Industrial	(KLD) with lication ar Applicati area with quantity KLD (Wh is used) (38.00 h (38.00 h (38.00 h (2.0 Kh cycle of wath h (KLD)	in feasib rea] ion in here it er (LD) ber LD) aste wa waste eneration 1	oility. Cha was reus TDS tewat on(Kl .20	racteristic ste water t sed (COD, 5 etc.) pH: 7.5- TDS: <200 BOD: B COD: B pH: 6.0- TSS: < 77 TDS: <250 BOD: <14 COD: <43 Give brief	s of o be BOD, 8.0) mg/l DL 2 mg/l 3 mg/l 3 mg/l note on jus Re treate	Remarks regarding feasibility to reuse Yes, it is feasible. stification as y emarks ed in ETP

			Caalin				
1			Coolin	g	1.40		
			Washin	g	1.50		
		Scru	bbing Solutio (25-309	n %	1.00		
			NaCl/NaOC	(I)			Will be treated in ETP
		Scru (10	bbing Solutio)-15% NaNO	2)	1.00		
	Scrubbing Solution (25-30% Liq.		n a. Á	1.00		Reuse within premises	
		Ammonia)					
	Scrubbing S (25-30% HB Scrubbing S (18-20% N		0% HBr/NaB	r)	1.50		Endliser
			bbing Solutio -20% Na ₂ SO	n , 3)	1.50		
			Total Inc	d. 4	1.50		
		Total	(1 + 2)	4	2.70		
	Quant	itative): Total W which V Worst C	Vaste Water (Vaste Water (Case Scenari	Generation of t Generation for o;	he propos Process v	ed projec vill be 32.	ct will be 42.70 KLD, out 00KLD.
	S.N	Pi	roduct	Waste Water Gen. (in KL) for 1 MT production	Total Produc tion (MT/M onth)	Total Waste water Gen. (KLD)	Characteristics
					í í		pH – 6.5 to 7.5
	1.	Om Mag	eprazole jnesium	9.52 KL	100	31.75 KLD	(Neutralization a source) TSS – 180 mg/l TDS – 20750 mg/l BOD – 11210 mg/l COD– 33980 mg/l
	1.	Om Mag	eprazole gnesium Hence Wor	9.52 KL st Case Cons	100 idered is	31.75 KLD 31.75 ~	(Neutralization a source) TSS – 180 mg/l TDS – 20750 mg/l BOD – 11210 mg/l COD– 33980 mg/l 32.0 KLD
D-4	1. Brief effluer projec	Ome Mag justifica t gener t (Whicl Not App There Balance of Dispos	Hence Wor tion in cas ration or no never is app blicable. will be efflu e. sal & Final m	9.52 KL st Case Cons e of no prod high concen licable). ent generation eeting point	100 idered is cess efflu tration ef	31.75 KLD 31.75 ~ Jent gen fluent gen fluent gen	(Neutralization a source) TSS – 180 mg/l TDS – 20750 mg/l BOD – 11210 mg/l COD– 33980 mg/l 32.0 KLD eration or no industr eneration from propos
D-4	1. Brief effluer projec > Mode of	Ome Mag justifica nt gener t (Whicl Not App There Balance of Disposi stic:	Hence Wor tion in cas ration or no never is app blicable. will be efflu e. sal & Final m	9.52 KL st Case Cons e of no prod high concen licable). ent generation eeting point stewater@ 1.2	100 idered is cess efflu tration ef	31.75 KLD 31.75 ~ Jent gen fluent gen etail has	(Neutralization a source) TSS – 180 mg/l TDS – 20750 mg/l BOD – 11210 mg/l COD– 33980 mg/l 32.0 KLD eration or no industreneration from propos been furnished in wa
D-4	1. Brief effluer projec > Mode of Dome	Ome Mag justifica nt gener t (Whicl Not App There Balance of Disposi stic:	eprazole gnesium Hence Wor tion in cas ration or no never is app blicable. will be efflu e. sal & Final m Domestic was be Subjected 36.0 KLD Tr facilityfor furf	9.52 KL st Case Cons e of no prod high concen licable). ent generation eeting point stewater@ 1.2 to ETP. eated waste of her treatment	100 idered is cess efflu tration ef h. The de KLD com water will & disposa	31.75 KLD 31.75 ~ Jent gen fluent gen fluent gen the sent bine with be sent	(Neutralization a source) TSS – 180 mg/l TDS – 20750 mg/l BOD – 11210 mg/l COD– 33980 mg/l 32.0 KLD eration or no industr eneration from propos been furnished in wa
D-4	1. Brief effluer projec > Mode of Dome Indust	Ome Mag justifica nt gener t (Whicl Not App There Balance of Disposi stic:	Hence Wor tion in cas ration or no never is app blicable. will be efflu asal & Final m Domestic was be Subjected 36.0 KLD Tr facilityfor furt	9.52 KL st Case Cons e of no proc high concen licable). ent generation eeting point stewater@ 1.2 to ETP. eated waster ther treatment disposal	100 idered is cess efflu tration ef h. The de KLD com water will & disposa	31.75 KLD 31.75 ~ Jent gen fluent gen etail has bine with be sent	(Neutralization a source) TSS – 180 mg/l TDS – 20750 mg/l BOD – 11210 mg/l COD– 33980 mg/l 32.0 KLD reration or no industr eneration from propos been furnished in wa
D-4	1. Brief effluer projec > > Mode of Indust	Ome Mag justifica nt gener t (Whicl Not App There Balance of Disposi stic: rial: 	eprazole gnesium Hence Wor tion in cas ration or no never is app blicable. will be efflu e. sal & Final m Domestic was be Subjected 36.0 KLD Tr Facilityfor furt n about final o ities waste water	9.52 KL st Case Cons e of no prod high concent licable). ent generation eeting point stewater@ 1.2 to ETP. eated waster ther treatment disposal : Allow into E	100 idered is cess efflu tration ef n. The de KLD comi water will & disposa	31.75 KLD 31.75 ~ Jent gen fluent gen etail has bine with be sent	(Neutralization a source) TSS – 180 mg/l TDS – 20750 mg/l BOD – 11210 mg/l COD– 33980 mg/l 32.0 KLD eration or no industr eneration from propos been furnished in wa industrial wastewater wil to Common Evaporatio
D-4	1. Brief effluer projec > Mode of Dome Indust - Clearly Treatm For Do Capac	Ome Mag justifica t gener t (Which Not App There Balance of Disposi stic:	Hence Wor tion in cas ration or no never is app blicable. will be efflu e. sal & Final m Domestic was be Subjected 36.0 KLD Tr Facilityfor furt n about final of ities waste water P: Not Applic	9.52 KL st Case Cons e of no prod high concen licable). ent generation eeting point stewater@ 1.2 to ETP. eated waster ther treatment disposal : Allow into E able	100 idered is cess efflu tration ef n. The de KLD comi water will & disposa	31.75 KLD 31.75 ~ Jent gen fluent gen fluent gen the sent bine with be sent	(Neutralization a source) TSS – 180 mg/l TDS – 20750 mg/l BOD – 11210 mg/l COD– 33980 mg/l 32.0 KLD eration or no industr eneration from propos been furnished in wa industrial wastewater wil to Common Evaporatio

Treat streat (ETP Treat [In-ho	tmer 1 m i . 1 -1, f tmer ouse	nt scheme includ .e. COD, BOD, 1 ETP-2) for ea nt facility within p ETP (Primary, 3	Ing segrega IDS etc.) In ch stream premises wit Secondary,	ation at source. case of stream shall be propos h capacity Tertiary), MEE,	(Give Charac segregation sed. Stripper, Spra	y Dryer, STP etc.
	→ H ✓ ✓	ydraulic Load – In-house Strip In-House Prim	per: 32.00 ł nary ETP:36	KLD 5.3 KLD		
	· C √	apacity— In-house Strip In-House ETP	per: 40.0 Kl : 45.0 KLD	LD		
Stre	am 1	I _				
> 	<u> </u>	/astewater 2.0 /	KLD (0.6 k ization cum	LD from Boiler Neutralization T	& 1.4 KLD ank & then re	from cooling) will be used for Scrubbing.
Sr.	1	Doromotor	Unit	Utilities Char	racteristics	Combine Effluent
No		Farameter	Unit	Boiler	Cooling	after neutralization
		Quantity (KLD))	0.6	1.4	2.0
1		pH	pH Unit	7.5-8.0	7.5-8.0	6.0-8.0
2		TSS	mg/L	56	87	77
3		TDS	mg/L	500	100	<250
4		BOD	mg/L	10	16	<14
5		000		30	50	<43
		COD	I MQ/L	00	50	
6 Strea ≻ (am 2 Sono	Ammo. Nitrogen 2– centrate stream	mg/L mg/L	Nil	Nil Norst Case).	Nil to in-house Solvent
6 Strea > (>	am 2 Cond t wi Strip	COD Ammo. Nitrogen 2– Centrate stream Il be neutralising per, where VOC ted effluent from	of 32.0 KLD g at source will be strip stripper (3	Nil from process (V then effluent w pped off. 1.6 KLD) will be	Nil Norst Case). vill be allowed allowed to in-h	Nil I to in-house Solvent house Primary ETP.
6 Strea > (> 1 > 2 > 2 > 1 Sr. No	am 2 Conc t wi Strip Frea	Ammo. Nitrogen Ammo. Nitrogen Centrate stream of Il be neutralising oper, where VOC ted effluent from Parameter	of 32.0 KLD g at source will be strip stripper (3 Unit	Nil from process (V then effluent w pped off. 1.6 KLD) will be Worst Case f	Nil Norst Case). vill be allowed allowed to in-h rom Process	Nil I to in-house Solvent house Primary ETP. After Solvent stripper
6 Strea > 0 > 1 Sr. No	am 2 Cond t wi Strip Trea	Ammo. Nitrogen Ammo. Nitrogen 2– Centrate stream Il be neutralising per, where VOC ted effluent from Parameter	of 32.0 KLD g at source will be strip stripper (3 Unit	Nil from process (V then effluent w ped off. 1.6 KLD) will be Worst Case f Omeprazole	Nil Norst Case). vill be allowed allowed to in-h rom Process Magnesium	Nil Ito in-house Solvent house Primary ETP. After Solvent stripper
6 Strea > (> Sr. No	am 2 Cond t wi Strip Trea	Ammo. Nitrogen Ammo. Nitrogen 2– Centrate stream of Il be neutralising per, where VOC ted effluent from Parameter Quantity (KLD	of 32.0 KLD g at source will be strip stripper (3 Unit	Nil from process (V then effluent w pped off. 1.6 KLD) will be Worst Case f Omeprazole 32 6 5-	Nil Norst Case). vill be allowed allowed to in-h rom Process Magnesium	Nil I to in-house Solvent nouse Primary ETP. After Solvent stripper 31.6
6 Strea > (> 1 Sr. No -	am 2 Conc It wi Strip Frea	Ammo. Nitrogen Ammo. Nitrogen 2– 2– 21 be neutralising per, where VOC ted effluent from Parameter Quantity (KLD pH	of 32.0 KLD g at source will be strip stripper (3 Unit) pH Unit	Nil from process (V then effluent w pped off. 1.6 KLD) will be Worst Case f Omeprazole 32 6.5- (Neutralizatio	Nil Norst Case). vill be allowed allowed to in-h rom Process Magnesium .0 .7.5 on at source)	Nil Ito in-house Solvent house Primary ETP. After Solvent stripper 31.6 6.5-7.5
6 Streat () () () () () () () () () ()	am 2 Cond It wi Strip	Ammo. Nitrogen 2– centrate stream of 1 be neutralising per, where VOC ted effluent from Parameter Quantity (KLD pH TSS	of 32.0 KLD g at source will be strip stripper (3 Unit pH Unit mg/l	Nil from process (V then effluent w ped off. 1.6 KLD) will be Worst Case f Omeprazole 32 6.5- (Neutralization 18	Nil Norst Case). vill be allowed allowed to in-h rom Process Magnesium .0 7.5 on at source) 30	Nil Ito in-house Solvent house Primary ETP. After Solvent stripper 31.6 6.5-7.5 180
6 Strea > 0 > 1 Sr. No 1 2 3	am 2 Condit wi Strip Trea	Ammo. Nitrogen Ammo. Nitrogen 2– centrate stream of 11 be neutralising per, where VOC ted effluent from Parameter Quantity (KLD pH TSS TDS	of 32.0 KLD g at source will be strip stripper (3 Unit pH Unit mg/L mg/L	Nil from process (V then effluent w pped off. 1.6 KLD) will be Worst Case fr Omeprazole 32 6.5- (Neutralization 18 207	Nil Norst Case). vill be allowed allowed to in-h rom Process Magnesium .0 7.5 on at source) 30	Nil Ito in-house Solvent house Primary ETP. After Solvent stripper 31.6 6.5-7.5 180 20750
6 Strea > (> 1 Sr. No 1 2 3 4	am 2 Concentration of the second seco	Ammo. Nitrogen Ammo. Nitrogen 2– centrate stream of ll be neutralising per, where VOC ted effluent from Parameter Quantity (KLD pH TSS TDS BOD	of 32.0 KLD g at source will be strip stripper (3 Unit pH Unit mg/L mg/L	Nil from process (V then effluent w pped off. 1.6 KLD) will be Worst Case f Omeprazole 32 6.5- (Neutralization 18 207 112	Nil Norst Case). Vill be allowed allowed to in-h rom Process Magnesium .0 .7.5 on at source) 30 250 210	Nil Ito in-house Solvent house Primary ETP. After Solvent stripper 31.6 6.5-7.5 180 20750 4484
6 Strea () () () () () () () () () ()	am 2 Concentration of the second seco	Ammo. Nitrogen Ammo. Nitrogen 2– Centrate stream of 11 be neutralising per, where VOC ted effluent from Parameter Quantity (KLD pH TSS TDS BOD COD	of 32.0 KLD g at source will be strip stripper (3 Unit D pH Unit mg/L mg/L mg/L mg/L	Nil from process (V then effluent w ped off. 1.6 KLD) will be Worst Case f Omeprazole 32 6.5- (Neutralization 18 207 112 330	Nil Norst Case). vill be allowed allowed to in-h rom Process Magnesium .0 .7.5 on at source) 30 .750 210 280	Nil Ito in-house Solvent nouse Primary ETP. After Solvent stripper 31.6 6.5-7.5 180 20750 4484 13592
6 Strea	am 2 Condit wi Strip Trea	Ammo. Nitrogen Ammo. Nitrogen Contrate stream of the neutralising per, where VOC ted effluent from Parameter Quantity (KLD pH TSS TDS BOD COD	of 32.0 KLD g at source will be strip stripper (3 Unit pH Unit mg/L mg/L mg/L mg/L	Nil from process (V then effluent w ped off. 1.6 KLD) will be Worst Case f Omeprazole 32 6.5- (Neutralization 18 207 112 339	Nil Norst Case). vill be allowed allowed to in-h rom Process Magnesium .0 7.5 on at source) 30 750 210 280	Nil Ito in-house Solvent house Primary ETP. After Solvent stripper 31.6 6.5-7.5 180 20750 4484 13592
6 Strea > 0 > 1 Sr. No 1 2 3 4 5 6	am 2 Conc It wi Strip Trea	Ammo. Nitrogen Ammo. Nitrogen 2– Centrate stream of 11 be neutralising per, where VOC ted effluent from Parameter Quantity (KLD pH TSS TDS BOD COD mmo. Nitrogen	of 32.0 KLD g at source will be strip stripper (3 Unit D pH Unit mg/L mg/L mg/L mg/L	Nil from process (V then effluent w pped off. 1.6 KLD) will be Worst Case f Omeprazole 32 6.5- (Neutralization 18 207 112 339 N	Nil Norst Case). Vill be allowed allowed to in-h rom Process Magnesium .0 .7.5 on at source) 30 .750 .210 .280 il	Nil Ito in-house Solvent house Primary ETP. After Solvent stripper 31.6 6.5-7.5 180 20750 4484 13592 NIL
6 Strea > 0 > 1 Sr. No - 1 2 3 4 5 6 Strea > 1 2 3 4 5 6	am 2 Condit wi Strip Trea Strip Trea Ar Ar Ar Scru	Ammo. Nitrogen Ammo. Nitrogen 2- centrate stream of ted effluent from Parameter Quantity (KLD pH TSS TDS BOD COD mmo. Nitrogen 3- e Stream 3.5 k bbing Soln.& 1. se Primary ETP.	of 32.0 KLD g at source will be strip stripper (3 Unit pH Unit mg/L mg/L mg/L mg/L mg/L	Nil P from process (V then effluent w ped off. 1.6 KLD) will be Worst Case f Omeprazole 32 6.5- (Neutralization 18 207 112 339 N LD from Washi 30% NaNO2 Scr	Nil Norst Case). vill be allowed allowed to in-h rom Process Magnesium .0 750 210 30 750 20 30 750 20 30 750 20 30 750 20 30 750 20 30 750 20 30 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 750 750 750 750 750 750 750 750 75	Nil A to in-house Solvent nouse Primary ETP. After Solvent stripper 31.6 6.5-7.5 180 20750 4484 13592 NIL 25-30% NaCl/NaOCI will be treated to in-
6 Strea → 1 → 1 → 1 → 1 → 1 → 1 → 1 → 1	am : Conc It wi Strip Trea Strip Trea Ar Ar Scru Dilut Scru Dus	Ammo. Nitrogen Ammo. Nitrogen 2- centrate stream of ll be neutralising per, where VOC ted effluent from Parameter Quantity (KLD pH TSS TDS BOD COD mmo. Nitrogen 3- e Stream 3.5 k bbing Soln.& 1. se Primary ETP. Parameter	of 32.0 KLD g at source will be strip stripper (3 Unit pH Unit mg/L mg/L mg/L mg/L mg/L (LD (1.5 K 0 KLD 25-3 Unit	Nil P from process (W then effluent w ped off. 1.6 KLD) will be Worst Case fr Omeprazole 32 6.5- (Neutralization 18 207 112 339 N LD from Washi 30% NaNO2 Scr Stream from Charao Washing	Nil Norst Case). Vill be allowed allowed to in-h rom Process Magnesium .0 .7.5 on at source) 30 .750 210 .20 .210 .20 .210 .20 .210 .20 .210 .20 .210 .20 .210 .20 .210 .20 .210 .20 .210 .20 .210 .20 .20 .20 .20 .20 .20 .20 .20 .20 .2	Nil Ito in-house Solvent nouse Primary ETP. After Solvent stripper 31.6 6.5-7.5 180 20750 4484 13592 NIL 25-30% NaCl/NaOCI will be treated to in- S Combine Effluent
6 Strea () () () () () () () () () ()	am 2 Con(It wi Strip Trea Strip Trea Oilut Ar	Ammo. Nitrogen Ammo. Nitrogen 2- centrate stream of ll be neutralising per, where VOC ted effluent from Parameter Quantity (KLD pH TSS TDS BOD COD mmo. Nitrogen 3- e Stream 3.5 k bbing Soln.& 1. se Primary ETP. Parameter Quantity (KL	of 32.0 KLD g at source will be strip stripper (3 Unit pH Unit mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	Nil From process (V then effluent wo ped off. 1.6 KLD) will be Worst Case from Omeprazole 32 6.5- (Neutralization 18 207 112 339 N LD from Washi 30% NaNO2 Scroption Stream from Charace Washing 1.5	Nil Norst Case). vill be allowed allowed to in-h rom Process Magnesium .0 750 750 210 30 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 750 750 750 750 750 750 750 750 75	Nil A to in-house Solvent nouse Primary ETP. After Solvent stripper 31.6 6.5-7.5 180 20750 4484 13592 NIL 25-30% NaCl/NaOCI will be treated to in- S Combine Effluent 3.5
6 Strea > 0 > 1 Sr. No 1 2 3 4 5 6 Strea > 1 Sr. No 1 2 3 4 5 6 Strea > 1 1 2 3 4 5 6 Strea > 1 1 2 3 4 5 6 Strea > 1 1 2 3 4 5 6 Strea > 1 1 1 1 1 1 1 1 1 1 1 1 1 1	am : Concilit wi Strip Trea Strip Trea Ar Ar Ar Scru Dilut Scru Dous	Ammo. Nitrogen Ammo. Nitrogen 2- centrate stream of l be neutralising per, where VOC ted effluent from Parameter Quantity (KLD pH TSS TDS BOD COD mmo. Nitrogen 3- e Stream 3.5 k bbing Soln.& 1. se Primary ETP. Parameter Quantity (KLI pH	of 32.0 KLD g at source will be strip stripper (3 Unit pH Unit mg/L mg/L mg/L mg/L mg/L (LD (1.5 K 0 KLD 25-3 Unit)	Nil P from process (W then effluent w ped off. 1.6 KLD) will be Worst Case fr Omeprazole 32 6.5- (Neutralization 18 207 112 339 N LD from Washi 30% NaNO2 Scr Stream from Charac Washing 1.5 6.0-7.0	Nil Norst Case). vill be allowed allowed to in-h rom Process Magnesium 30 750 210 30 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 20 750 750 750 750 750 750 750 750 750 75	Nil A to in-house Solvent nouse Primary ETP. After Solvent stripper 31.6 6.5-7.5 180 20750 4484 13592 NIL 25-30% NaCl/NaOCI will be treated to in- S Combine Effluent 3.5 6.0-8.0
6 Strea > (> 1 Sr. No - - - - - - - - - - - - -	am 2 Conc It wi Strip Trea Strip Trea Am 3 Dilut Scru Dollut Scru Dollut	Ammo. Nitrogen Ammo. Nitrogen 2- centrate stream of ll be neutralising per, where VOC ted effluent from Parameter Quantity (KLD pH TSS TDS BOD COD mmo. Nitrogen 3 - e Stream 3.5 k bbing Soln.& 1. se Primary ETP. Parameter Quantity (KLD pH TSS	of 32.0 KLD g at source will be strip stripper (3 Unit pH Unit mg/L mg/L mg/L mg/L mg/L Mg/L Mg/L Mg/L Mg/L Mg/L Mg/L	Nil P from process (We then effluent wo ped off. 1.6 KLD) will be Worst Case fr Omeprazole 32 6.5- (Neutralization 18 207 112 339 N LD from Washi 30% NaNO2 Scr Stream from Charac Washing 1.5 6.0-7.0 150	Nil Norst Case). Vill be allowed allowed to in-h rom Process Magnesium 20 750 750 750 750 750 750 750 750 750 75	Nil A to in-house Solvent nouse Primary ETP. After Solvent stripper 31.6 6.5-7.5 180 20750 4484 13592 NIL 25-30% NaCl/NaOCI will be treated to in- S Combine Effluent 3.5 6.0-8.0 133

	3	T	DS	mg/L	2500	500		1350
	4	BC	DD	mg/L	800	210		460
	5	CC	DD	mg/L	2400	625		1380
	6	Ammo.	Nitrogen	mg/L	Nil	Nil		Nil
	Strea > C K > T tr	m 4(Combine Effl Combine Effl (LD + Dome: Treated Efflu reatment and	ned Treat uent 36.30 stic Waste lent 35.9~ d disposal	ed of Stread OKLD (Dille water 1.2 -36 KLD s	am-2 + Stre ute Stream KLD) will be sent to Con	am-3& Dome 3.5 KLD + Af treated in-ho nmon Evapor	estic Waste ter Solvent S use Primary ration Facility	Water) Stripper 3 ETP. y for furt
	Sr. No	Paramet er	Unit	Combine ne Effluen t from	After Solvent stripper	Domestic Wastewat er	Effluent to primary	After Primar treatme t
		Quantity (K	(ח ו)	2 5	31.6	12	36 30	~36.0
	1	pH	pH Unit	6.0-8.0	6.5-7.5	6-8	6.5-7.5	6.5-7.5
	2	TSS	mg/L	133	180	300	175	53
	3	TDS	mg/L	1350	20750	750	18220	<u>19</u> 130
	4	BOD	mg/L	460	4484	250	3945	3150
	5	COD	mg/L	1380	13592	10	11960	9550
	6	Ammo.	mg/L	NIL	NIL	NIL	NIL	NIL
	▶ 1 u ▶ 1 Note:	.5 KLD (25- sers register .0 KLD (25- (In case of (30% Na ₂ red under <u>30% Liq. /</u> CETP disc	SO ₃) and 7 Rule-9. (mmonia) (1.5 KLD (25 will be reuse	-30 % NaBr/	HBr) will be nises.	sent to e
	Mana the V regar • Brief 1	gement of Nater (Prev ding compl Not Applic Facility for note on adec Treated Ef	waste wa vention a iance of (able – Tre further tre quacy of Z fluent 36.0	ter keepin and Contr CETP. eated Efflue eatment an LD (In cas 0 KLD will	ng in view of ol of Pollu ent 36.0 KLI d disposal. e of Zero Lid be sent to C	direction und ution) act, 1 D will be sent quid Discharg ommon Evap	ler section 1974 issued to Common e): oration Facil	18 (1) (b) I by CP Evaporat
D-6	In cas CHW Name	further trea se of Commo IF etc. e of Commo	atment and on facility (n facility	<u>d disposal.</u> (CF) i.e. CI (CF) (For y	ETP, Comm waste wate	on Spray dry r treatment)	yer, Commo	n MEE,
		Common	Evanoratio	n Englity				
	Memt occuj memt	Common I Vide letter pership of C pied capac per units in-l	Evaporatic r No.: BEI ommon fa ity and s ine with t	on Facility L/ANK/202 Incility (CF) Incility (CF) Incility (CF) Incility (CF)	21 Dated: 2 mentioning acity and n n given by	3/04/2021 total capacin orms of accord GPCB vide L	ty, consent e eptance of e etter No. GF	ed quant effluent fr PCB/P-1/8

	Τ	TOTAL PROPOSED WATER BA	LANCE		Source: Tanke	er Supply	
		Г	Water Poo + 1	113.5	BASIS	: KLD	
			Fresh:73.5 + Recycle,	/Reuse:40.0			
			+		1		
		Dom: 1.5	Tota Fresh:61.5 +	al Ind: 101.5 Recycle/Reuse:40.0	Green Belt: 10).5	
		1.2		10 +	£-**		
		Process	32 Washing 1.5	Boiler Cooli 48 14	ng Scru 6.0 (Fresh:4.	ubbing .0 + Reuse:2.0)	
	Reco	vered		38	2.0 ETP-1 Neutralization)	╺┶───── ╶┐┌──╺┿──┐ <u>┌──</u> ╺┿──	
	strip; be s	er will Solvent Strip	per 0.40 1.5	0.6 1.4	1.0 NaCl/NaOCI	1.0 1.5 NaNO ₂ NaBr/HBr	1.5 1.0 Na ₂ SO ₃ Liq. Ammonia
	pro	c/Co			(25-50%)	(25-30%)	(18-20%) (25-30%)
	OR	HWIF 31.6]	•		¥	Reuse within
		+	+	•	+	To Er	nd User premises
				35.1			
				¥ 36.3			
		L		Primary ETP	0.4	4 to SDB TSDF (BEIL)	
				★ 35.9~ 36.0 KLD			
			(Common Evaporation	Facility		
_							
E E 1		and omission					
E E-1	Flue	e gas emission of Boilers/TFH/	i details Furnaces/F)G sets etc.	with capacitie	es viz. TPH, Kca	al/hr. MT/hr. KVA
<u>E</u> E-1	Flue No.	e gas emission of Boilers/TFH/	Furnaces/E	OG sets etc.	with capacitie	es viz. TPH, Kca	al/hr, MT/hr, KVA
<u>E</u> E-1	Flue No. etc.	e gas emission of Boilers/TFH/	Furnaces/E	DG sets etc.	with capacitie	es viz. TPH, Kca all be in line to th	al/hr, MT/hr, KVA ne mechanism
<u>E</u> E-1	Flue No. etc. (In c	e gas emission of Boilers/TFH/ case of Project I ished in the M0	Furnaces/E ocated with DEFCC's O	DG sets etc. hin CPA/SP/ M vide date	with capacitie A , APCM sha d 31.10.2019	es viz. TPH, Kca all be in line to th	al/hr, MT/hr, KVA ne mechanism
<u>E</u> E-1	Flue No. etc. (In c publ	e gas emission of Boilers/TFH/ case of Project I ished in the MC	Furnaces/E ocated with DEFCC's O	DG sets etc. hin CPA/SP/ M vide date	with capacitie A , APCM sha d 31.10.2019	es viz. TPH, Kca all be in line to th)	al/hr, MT/hr, KVA ne mechanism
E E-1	Flue No. etc. (In c publ	e gas emission of Boilers/TFH/ case of Project I ished in the MC	Furnaces/E ocated with DEFCC's O	DG sets etc. hin CPA/SP/ M vide date	with capacitie A , APCM sha d 31.10.2019 Fuel	es viz. TPH, Kca all be in line to th) Concentrati	al/hr, MT/hr, KVA ne mechanism Air Pollution
E-1	Flue No. etc. (In c publ	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached	Furnaces/E ocated with DEFCC's O Stack Height	DG sets etc. hin CPA/SP/ M vide date	with capacitie A , APCM sha d 31.10.2019 Fuel Consump	es viz. TPH, Kca all be in line to th) Concentrati on of	al/hr, MT/hr, KVA ne mechanism Air Pollution Control
E E-1	Flue No. etc. (In c publ	e gas emission of Boilers/TFH/ case of Project I ished in the MC Stack attached to	Furnaces/E ocated with DEFCC's O Stack Height & Dia	DG sets etc. hin CPA/SP/ M vide date Type of Fuel	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion	es viz. TPH, Kca all be in line to th) Concentrati on of Pollutants	al/hr, MT/hr, KVA ne mechanism Air Pollution Control Measures
E	Flue No. etc. (In c pub Sr. No	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to	Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter)	DG sets etc. hin CPA/SP/ M vide date Type of Fuel	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion	es viz. TPH, Kca all be in line to th) Concentrati on of Pollutants	al/hr, MT/hr, KVA ne mechanism Air Pollution Control Measures (APCM)
E	Flue No. etc. (In c pub Sr. No	e gas emission of Boilers/TFH/ case of Project I ished in the MC Stack attached to	Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter)	DG sets etc. hin CPA/SP/ <u>M vide date</u> Type of Fuel Natural	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day	es viz. TPH, Kca all be in line to th) Concentrati on of Pollutants	Al/hr, MT/hr, KVA ne mechanism Air Pollution Control Measures (APCM) MCS + Bag Filter& Water
E	Flue No. etc. (In c pub Sr. No	e gas emission of Boilers/TFH/ case of Project I ished in the MC Stack attached to Boiler	Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter)	DG sets etc. hin CPA/SP/ M vide date Type of Fuel Natural Gas	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR	es viz. TPH, Kca all be in line to th)) Concentrati on of Pollutants	Al/hr, MT/hr, KVA ne mechanism Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber &
E	Flue No. etc. (In c pub Sr. No -	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH)	Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter)	DG sets etc. hin CPA/SP/ M vide date Type of Fuel Natural Gas OR	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9 0	es viz. TPH, Kca all be in line to th) Concentrati on of Pollutants	Al/hr, MT/hr, KVA ne mechanism Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate
E	Flue No. etc. (In c pub Sr. No	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH)	Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter)	DG sets etc. hin CPA/SP/ <u>M vide date</u> Type of Fuel Natural Gas OR Bio Coal	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day	es viz. TPH, Kca all be in line to th) Concentrati on of Pollutants PM < 150	al/hr, MT/hr, KVA ne mechanism Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height
E	Flue No. etc. (In c pub Sr. No	e gas emission of Boilers/TFH/ case of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic	Getails Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5	DG sets etc. hin CPA/SP/ M vide date Type of Fuel Natural Gas OR Bio Coal	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day 1920	es viz. TPH, Kca all be in line to th) Concentrati on of Pollutants PM < 150 mg/Nm3	al/hr, MT/hr, KVA ne mechanism Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height
E	Flue No. etc. (In c pub Sr Nc	e gas emission of Boilers/TFH/ case of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid	Getails Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5	DG sets etc. hin CPA/SP/ M vide date Type of Fuel Natural Gas OR Bio Coal Natural	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day 1920 SCM/Dav	es viz. TPH, Kca all be in line to th)) Concentrati on of Pollutants PM < 150 mg/Nm3 SO2 < 100	al/hr, MT/hr, KVA ne mechanism Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS
E	Flue No. etc. (In c pub Sr. Nc 1.	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater	Getails Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5	DG sets etc. nin CPA/SP/ <u>M vide date</u> Type of Fuel Natural Gas OR Bio Coal Natural Gas	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day 0R 9.0 MT/Day 1920 SCM/Day 0R	PM < 150 mg/Nm3 SO2 < 100 ppm	al/hr, MT/hr, KVA ne mechanism Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate
E	Flue No. etc. (In c pub Sr. Nc 1.	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater (5 Lacs	Getails Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5	DG sets etc. nin CPA/SP/ <u>M vide date</u> Type of Fuel Natural Gas OR Bio Coal Natural Gas OR	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day 1920 SCM/Day OR 4.0	PM < 150 mg/Nm3 SO2 < 100 ppm NOX < 50	Al/hr, MT/hr, KVA me mechanism Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate Stack height
E	Flue No. etc. (In c pub Sr Nc	e gas emission of Boilers/TFH/ case of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater (5 Lacs Kcal/hr.)	Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5	DG sets etc. hin CPA/SP/ M vide date Type of Fuel Natural Gas OR Bio Coal Natural Gas OR Bio Coal	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day 0R 1920 SCM/Day OR 4.0 MT/Day	PM < 150 mg/Nm3 SO2 < 100 ppm NOX < 50 ppm	Al/hr, MT/hr, KVA me mechanism Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate Stack height
E	Flue No. etc. (In c pub Sr, Nc • 1.	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater (5 Lacs Kcal/hr.) DG Set	Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5	DG sets etc. nin CPA/SP/ <u>M vide date</u> Type of Fuel Natural Gas OR Bio Coal Natural Gas OR Bio Coal	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day 1920 SCM/Day OR 4.0 MT/Day	es viz. TPH, Kca all be in line to th)) Concentrati on of Pollutants PM < 150 mg/Nm3 SO2 < 100 ppm NOX < 50 ppm	Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate Stack height
E	Flue No. etc. (In c pub) Sr. Nc 1. 2. 3.	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater (5 Lacs Kcal/hr.) DG Set 125 KVA	Getails Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5 11/0.25	DG sets etc. nin CPA/SP/ <u>M vide date</u> Type of Fuel Natural Gas OR Bio Coal Natural Gas OR Bio Coal Diesel	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day 0R 9.0 MT/Day 0R 4.0 MT/Day 15 lit/Hr.	PM < 150 mg/Nm3 SO2 < 100 ppm NOX < 50 ppm	Al/hr, MT/hr, KVA me mechanism Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate Stack height
E	Flue No. etc. (In c pub) Sr. Nc 1. 2. 3.	e gas emission of Boilers/TFH/ case of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater (5 Lacs Kcal/hr.) DG Set 125 KVA (Stand by)	Getails Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5 11/0.25	DG sets etc. hin CPA/SP/ M vide date Type of Fuel Natural Gas OR Bio Coal Natural Gas OR Bio Coal Diesel	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day 0R 4.0 MT/Day 15 lit/Hr.	es viz. TPH, Kca all be in line to th)) Concentrati on of Pollutants PM < 150 mg/Nm3 SO2 < 100 ppm NOX < 50 ppm	Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate Stack height Adequate Stack height
E-1	Flue No. etc. (In c pub Sr Nc 1. 2. 3.	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater (5 Lacs Kcal/hr.) DG Set 125 KVA (Stand by)	Getails Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5	DG sets etc. nin CPA/SP/ <u>M vide date</u> Type of Fuel Natural Gas OR Bio Coal Natural Gas OR Bio Coal Diesel	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day 1920 SCM/Day OR 4.0 MT/Day 15 lit/Hr.	PM < 150 mg/Nm3 SO2 < 100 ppm NOX < 50 ppm	Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate Stack height
E-1 E-1	Flue No. etc. (In c pub) Sr. Nc 1. 2. 3.	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater (5 Lacs Kcal/hr.) DG Set 125 KVA (Stand by)	Getails Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5 11/0.25 ype of pollu	DG sets etc. nin CPA/SP/ M vide date Type of Fuel Natural Gas OR Bio Coal Natural Gas OR Bio Coal Diesel	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day 1920 SCM/Day OR 4.0 MT/Day 15 lit/Hr.	PM < 150 mg/Nm3 SO2 < 100 ppm NOX < 50 ppm	Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate Stack height Adequate Stack height
E-1 E-1	Flue No. etc. (In c pub Sr Nc 1. 2. 3. Pro	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater (5 Lacs Kcal/hr.) DG Set 125 KVA (Stand by)	Getails Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5 11/0.25 ype of pollu	DG sets etc. hin CPA/SP/ M vide date Type of Fuel Natural Gas OR Bio Coal Natural Gas OR Bio Coal Diesel ttant gases (with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day 1920 SCM/Day OR 4.0 MT/Day 15 lit/Hr.	es viz. TPH, Kca all be in line to th)) Concentrati on of Pollutants PM < 150 mg/Nm3 SO2 < 100 ppm NOX < 50 ppm	Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate Stack height Adequate Stack height
E-1 E-1	Flue No. etc. (In c pub Sr Nc 1. 2. 3. Pro	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater (5 Lacs Kcal/hr.) DG Set 125 KVA (Stand by) Cess gas i.e. T	Stack Height & Dia (Meter) 30/0.5	DG sets etc. nin CPA/SP/ <u>M vide date</u> Type of Fuel Natural Gas OR Bio Coal Natural Gas OR Bio Coal Diesel tant gases (with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day 1920 SCM/Day OR 4.0 MT/Day 15 lit/Hr. (SO ₂ , HCl, NH Stack/V ent Height/	es viz. TPH, Kca all be in line to th) Concentrati on of Pollutants PM < 150 mg/Nm3 SO2 < 100 ppm NOX < 50 ppm	Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate Stack height Adequate Stack height
E E-1 E-3	Flue No. etc. (In c pub Sr. Nc 1. 2. 3. Pro	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater (5 Lacs Kcal/hr.) DG Set 125 KVA (Stand by) cess gas i.e. T r. Specific (Name of	Stack Height & Dia (Meter) 30/0.5 30/0.5	DG sets etc. hin CPA/SP/ M vide date Type of Fuel Natural Gas OR Bio Coal Natural Gas OR Bio Coal Diesel tant gases (f emission ct & Proces	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day 0R 9.0 MT/Day 1920 SCM/Day 0R 4.0 MT/Day 15 lit/Hr. (SO ₂ , HCl, NF Stack/V ent Height/ Diag	PM < 150 mg/Nm3 SO2 < 100 ppm NOX < 50 ppm	Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate Stack height Adequate Stack height Adequate Stack height
E E-1 E-3	Flue No. etc. (In c pub Sr. Nc 1. 2. 3. Proc	e gas emission of Boilers/TFH/ ase of Project I ished in the MC Stack attached to Boiler (2.0 TPH) Thermic Fluid Heater (5 Lacs Kcal/hr.) DG Set 125 KVA (Stand by) Cess gas i.e. Tr f. Specific (Name of figure 1)	Getails Furnaces/E ocated with DEFCC's O Stack Height & Dia (Meter) 30/0.5 ype of pollu c Source of the Product	DG sets etc. hin CPA/SP/ M vide date Type of Fuel Natural Gas OR Bio Coal Natural Gas OR Bio Coal Diesel tant gases f emission t & Proces	with capacitie A , APCM sha d 31.10.2019 Fuel Consump tion 4520 SCM/Day OR 9.0 MT/Day 1920 SCM/Day OR 4.0 MT/Day 15 lit/Hr. (SO ₂ , HCl, NF Stack/V ent Height/ Dia. (mathematical stack)	es viz. TPH, Kca all be in line to th) Concentrati on of Pollutants PM < 150 mg/Nm3 SO2 < 100 ppm NOX < 50 ppm	Air Pollution Control Measures (APCM) MCS + Bag Filter& Water Scrubber & Adequate Stack height MCS &Adequate Stack height Adequate Stack height Adequate Stack height

1	Rea (C Itopric	iction Vesso Chlorination de Hydroch	el-1 n) loride		18/0.2	Cl ₂ : 9 mg/Nm3 HCI: 20 mg/Nm3	3) 3	Two Stage Alkali Scrubber
2	2 Rea	iction Vesso (Nitration) Nicorandil	el-2		18/0.2	NOx: 28 mg/Nm3	5 3	Two Stage Alkali Scrubber
3	Rea (B 3-(2-bromoa 2-(benzyl hydroxyp	action Vessa promination acetyl)pheny (methyl)am henyl)ethai	el-3 n) /I aceta iino-1-(ne-1-or	ate or (3- ne	18/0.2	HBr:30 mg/Nm3	3	Two Stage Alkali Scrubber
4	Rea (\$ 3-(3-Ami benzoyl)-r propion	iction Vess Sulfonation ino-4-methy oyridine-2-y nic acid ethy	el-4)) /lamino /l-amin /l ester	0- 0)-	18/0.2	SO₂:40 mg/Nm3	3	Two Stage Alkali Scrubber
5	i Rea	ction Vess Amination	el-5)		18/0.2	NH3: 17 mg/Nm3	5	Two Stage Water Scrubber
	 Requirement (Product wis Yearly gener 	of the scr e and Tota ation of all	ubbing I) I bleed	g media I liquors	a (KL per D s (MT/KL p	ay) consi er Annum	dering n) as n	g solubility nentioned
S n	 Requirement (Product wis Yearly gener above and its Product 	e and Tota ation of all s sound m Gaseou s Raw Material	ubbing bleed anage Pro ces s Gas Emi ssi	g media l liquors <u>ment in</u> Tota I Emi ssio n (MT/	a (KL per D s (MT/KL p HW matrix Require ment of Scrubbi ng Media (KL Per	ay) consi er Annum <u>x.</u> Soluti on/ bleed liquor s (KI D)	dering n) as n Sol ubil ity (%)	g solubility nentioned Solution / Bleed liquors (MT/Annu m)
S n	 Requirement (Product wis Yearly gener above and its Product Itopride Hydrochloride 	Gaseou s Raw Material	ubbing Ibleed anage Pro ces S Gas Emi ssi on HCI /CI2	g media l liquors ment in Tota I Emi ssio n (MT/ Day)	a (KL per D s (MT/KL p HW matrix Require ment of Scrubbi ng Media (KL Per Day) 0.7 (Caustic + Water)	ay) consi er Annum x. Soluti on/ bleed liquor s (KLD) 1.0	dering h) as n Sol ubil ity (%)	solubility nentioned Solution / Bleed liquors (MT/Annu m) 365 MT/Annum (25-30 % NaCl/
2	 Requirement (Product wis Yearly gener above and its Product Itopride Hydrochloride Nicorandil 	Gaseou s Raw Material Thionyl chloride	ubbing bleed anage Pro ces s Gas Emi ssi on HCI /CI2 NO x	g media l liquors ment in Tota I Emi ssio n (MT/ Day) 0.30	A (KL per D (KL per D (MT/KL per HW matrix Require ment of Scrubbi ng Media (KL Per Day) 0.7 (Caustic + Water) 0.85 (Caustic + Water)	ay) consi er Annum x. Soluti on/ bleed liquor s (KLD) 1.0	dering n) as n Sol ubil ity (%) > 90 > 90	solubility nentioned Solution / Bleed liquors (MT/Annu m) 365 MT/Annum (25-30 % NaCl/ NaOCl) 365 MT/Annum (10-15 % NaNO ₂)

	Sr. no 1	of Hazardous waste ETP Sludge	gene (Name Activity, et	Produ Produ c.)	e uct	Schedul e as per HW Rules. 35.3/S CH-I	(MT/ Annu m) 150.0	Mana	agement of HW
	Sr. no	of Hazardous waste	gene (Name Activity, et	e of the , Produ :c.)	e uct	Schedul e as per HW Rules.	(MT/ Annu m)	Mana	agement of HW
		Type/Name	Specific	Source	e of	y and	Quant		
F-1	Haza	rdous waste n	nanagemer	nt matr		Categor			
	>	Disposal to s	scrap vend	ors/ve	ndors/t	raders is i	not allow	/ed	
		Quantifications	on of haza shall be in	rdous corpoi	waste rated in	shall be l EMP deta	based of ails sepa	n mass ratelv.	balance and
		permission, T	SDF/CHWI	H.	03, OE		aciual		
		Priorities	for HW	Mai nremis	nageme	ent: Pre	-process	ing, (Co-Processing
	Rules Note	s 2016.			-				
F	Haza (As p	rdous waste er the Hazardou	us and Othe	er Wast	tes (Ma	nagement	and Tran	sbounda	ary Movemen [.]
_	 					•			
	•	Overflow syst	tem with ret	urn line	e to sto	rage tank f	rom batc	h tank w	vill be provide
	•	De-dusting sy All transfer po	/stem will be	e provie fullv cle	ded at s osed.	olid produc	ct finishin	g area.	
	•	Green belt wi	ll be develo	ped alo	ong the	plant prem	ises	Jiaye al	. .
	•	For particulat	te / dust er	nission	ns from	the coal h	nandling	system:	Water will b
		loading, trans draft and con	sfer area, s trolled bv du	hall be ust coll	e collect ector.	ted through	n hoods	and due	cts by induce
	•	Fugitive emi	a preventiv ssion over	re main react	tenance tors, fo	e of valves, ormulation	rianges, areas,	joints, e centrifu	etc. ges, chemica
	•	Proper preve	ntive mainte	enance	of roofs	s and seals	for tanks	S	4-
	•	Selection / us Provision of r	e of state-o	of-the a seals in	rt leak p	proof valves	8		
	[o m •	itigate fugitive e Minimum nun	missions, the hole of flang	ne tollo ges, joi	wing ste nts and	eps would l valves in p	be taken: bipelines		
∟-4	Tugi								
E . 4	Euri	tivo omission a		to mitio	nation m			-	Liq. Ammonia)
	5	Etoricoxib	Ammoni a gas	NH 3	0.3	0.7 (Water)	1.0	> 90	MT/Annum (25-30%
		ethyl ester							365
		amino)- propionic acid	chloride	2		+ Water)		90	(18-20% Na ₂ SO ₃)
	4	benzoyl)- pyridine-2-yl-	Thionyl	SO ₂	0.30	1.20 (Caustic	1.5	>	547.5 MT/Annum

			tetrahydrothieno[3,2- c]pyridine HCI			
	3	Used Oil/ Spent Oil	Maintenance Activities	5.1/SC H-I	0.2	Collection, Storage, Transportation; reuse as lubricant or by selling to Authorized re- refiners.
	4	Discarded Containers / Bags/Liner s	Raw Material Supplier	33.1/SC H-I	100 (Nos. 4500 Contai ner) (Nos. 50000 Bags/ Liners)	Collection, Storage, Transportation; Decontamination and Reuse or Sale to Authorized Vendor.
	5	Distillation Residue	Mfg Process 2-Hydroxy methyl-3- methyl pyridine hydrochloride	20.3/S CH-I	257.0	Collection, Storage,
	6	Process Waste (Organic)	Mfg. Process Roxithromycin	28.1/S CH-I	1135. 0	Transportation &Disposal by send to pre/co
	7	Spent Carbon/ Hyflow	Mfg. Process Carbidopa	28.3/S CH-I	122.0	processing unit (Cement Industries) OR by
	8	Spent catalyst	Mfg. Process 4-((2- isopropoxyethoxy)meth yl)phenol	28.2/S CH-I	213.0	incineration at CHWIF.
			Mfg. Process Carvedilol		*9310 .0	Collection, Storage, Handling recover & reused by subjecting to distillation assembly within the Premises.
	9	Spent Solvent	Solvent Stripper	28.6/S CH-I	150.0	Collection, Storage, Transportation & sent to pre/co- processing (cement industries) or disposal by incineration at CHWIF
	1 0	Scrubbing Solution 25-30% NaCl/ NaOCl	From Scrubber Mfg. process Itopride Hydrochloride	28.1/S CH-I	365 KL	Collection, Storage
	1 1	Scrubbing Solution 10-15% NaNO ₂	From Scrubber Mfg. process Nicorandil	28.1/S CH-I	365 KL	

	Sr.	Type/Name of Other wastes		Specific Source of generation (Name of the Activity Product etc.)			Quan (MT/A	tity Ann Ma	Management of Wastes		
F-3	For Incineration: M/s. BEIL, Ankleshwar (Vide letter No.: BEIL/ANK/2021 Dated: 24/04/2021 Details of Non-Hazardous waste & its disposal (MSW and others)										
F-2	Membership details of TSDF, CHWIF etc. (For HW management)										
	Total MT/Year				427.05 930 ~9		07.50 9310	9734.	55		
	Total MT/Da			у	1.17	25.50		26.67		-	
			Ethyl	acetate	0.07	1.60		1.67		10 KL X 1 Nos. 15 KL X 1 Nos.	
	Car	vedilol	Cyclo	ohexane	0.27	6.40		6.67		15 KL X 1 Nos.	
				luene	0.50	9.50		10.00		20 KL X 1 Nos.	
				IPA	0.33	8	3.00	8.33		15 KLX 1 Nos.	
	Product Name		Solvent		Fresh Qty. Used Re MT/Day N		Qty. overed T/Day	Qty. Used MT/Day		Tank Storage (At a Time)	
	*Just	on ification f	or sp	ent solv	ent generat	tion 8	& Captive	e reused		Cement Industries	
	1	Off Specificati		Mfg. Process (Batch Failure)			28.4/S CH-I	1.0	C T & D	Collection, Storage ransportation send to pre/co rocessing unit	
	1 4	Scrubbing Solution 18-20% Na ₂ SO ₃ I		From Scrubber Mfg. process 3-(3-Amino-4- methylamino-benzoyl)- pyridine-2-yl-amino)- propionic acid ethyl ester		/l)-)- /l	28.1/S CH-I	547.5 KL	ľ	having permission under Rule-9.	
	1 3	Scrubbing Solution 25-30% HBr/NaBr		Mfg. process 3-(2- bromoacetyl)phenyl acetate or 2- (benzyl(methyl)amino -1-(3- hydroxyphenyl)ethan e-1-one			28.1/S CH-I	547.5 KL		Collection, Storage, Transportation & Sell to End Users	
				From	Scrubber						
	1 2	Scrubbing Solution 25-30% Liq. Ammonia		From Scrubber Mfg. process Etoricoxib			28.1/S CH-I	365 KL	a	Mfg Process: 2- methoxy-5- sulfamoylbenzoic acid:3600MT/Annu	
		Scrubbir	ng								
	1	Fly Ash	Fuel (Bio-coal)		470	Co trans Brick farn	Collection, storage, transportation & send to Brick manufacturer OR farmer for agricultural purposes.				
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		4									
G	Solver	it manageme	nt, voc emissi	ons etc.	0 1 1		,				
G-1	Brief N	Note on types	s of solvents, L	Jetails of	Solvent re	ecovery, %	6 recovery	, reuse of			
	Sr. No.	Product Name	tc. Solvent Qty. Used MT/MT N		Qty. Recove red MT/MT	Distilla tion Residu e	Total Losses	Solvent Recover y %			
			IPA	2.50	2.4	0.0625	0.1000	96			
	1	Licipopril	Toluene	3.00	2.85	0.1050	0.1500	95			
		Lisinophi	Cyclohexane	2.00	1.92	0.0500	0.0800	96			
			Ethyl acetate	Ethyl acetate 0.50		0.0125	0.0200	96			
G-2	Brief N	lote on LDAF	R proposed:			ii					
	The Fo	llowing metho	odology to be ac	lopted dur	ing LDAR s	study:					
	\succ	Identify the C	hemical stream	s that mus	st be monito	ored.					
	\succ	Types of com	nponents (pump	s, valves,	connectors	s, etc.) to b	e monitore	ed			
	\succ	Frequency of	⁻ monitoring.								
	\succ	Actions to be	taken if a leak i	s detected	ł.						
	\succ	Length of tim	e in which an at	tempt to r	epair the le	ak must b	e performe	ed.			
		Actions that r	nust be taken if	a leak car	nnot be rep	aired withi	n guideline	es.			
		Record-keep	ing and reportin	g requiren	nents.						

		ISW Gaskets in solvent pi	pelines to prever	nt leakage from	m flanges.			
		To eliminate chances of leakages from glands of pumps, mechanical seal will						
	b	be provided at all solvent pumps.						
	≻ A a	All the rotating equipments like pumps will be installed with Mechanical Seals to arrest any sort of emissions.						
	> C	ondenser and scrubber po	ost Reactor with	cooling arrang	gement.			
	> E m	nclosures to chemical sto naterials in particular solve	rage area, collect ents through hoc	ction of emission of emission of emission of emission of the second second second second second second second s	on from loading of ra by induced draft, ar			
	► Ir	r case the small spillag vermiculate) on material a	e or leakage o nd collect the co	bserved, first	pour the china cla			
	a ≻ If	nd send to ETP. the spillage is of inflamma	able liquid, switc	h off all the po	ower supply in the are			
	tc ≻ T	o prevent Electric Spark. wo condensers will instal	with cooling wa	ater and chille	ed brine to recover th			
	Si > P	olvent. rimary Condenser HE-01:		water or Chille	ad water at 5 °C will h			
		sed to condense the solv onditions and the noncor	ents depend on idensed vapors	the vapor pre will be conde	essure at its operatir ensed in a Seconda			
		condenser. OC Trap Condenser HE-	02: Chilled Brine	e at -15 °C wi	ill be used to trap ar			
	tr	aces of Solvent which is s	lipped from Seco	ondary conder	nser.			
1		Emission of VOCs can be trapped from breathing and loading losses from storage tanks, venting of process vessels, leak from piping and equipment by means of hood connected with blower and send to condenser as shown in following diagram.						
	s m fc	torage tanks, venting of p neans of hood connected ollowing diagram.	rocess vessels, with blower ar	nd send to co	ing and equipment to ondenser as shown			
	s∵ m fc ≻ C	torage tanks, venting of p neans of hood connected ollowing diagram. condensed VOCs will be s	rocess vessels, with blower ar end to spent solv	vent recovery	ping and equipment to ondenser as shown plant.			
	s m fc ≻ C	torage tanks, venting of p neans of hood connected ollowing diagram. condensed VOCs will be s	rocess vessels, with blower ar end to spent solv	vent recovery	ning and equipment to ondenser as shown plant.			
H	s n fc > C SAFETY	torage tanks, venting of p neans of hood connected ollowing diagram. condensed VOCs will be so details	rocess vessels, with blower ar end to spent solv	vent recovery	ning and equipment bondenser as shown plant.			
H H-1	SAFETY Details r	torage tanks, venting of p neans of hood connected ollowing diagram. condensed VOCs will be s details regarding storage of Haz	rocess vessels, with blower ar end to spent solv ardous chemic	vent recovery	ping and equipment to ondenser as shown plant.			
H H-1	s n fc > C SAFETY Details r (For tanl	torage tanks, venting of p neans of hood connected ollowing diagram. condensed VOCs will be so details regarding storage of Haz k storages only including	rocess vessels, with blower ar end to spent solv ardous chemic g spent acid an	als	ping and equipment to ondenser as shown plant. Plant.			
H H-1	SAFETY Details r (For tank	torage tanks, venting of p neans of hood connected ollowing diagram. Condensed VOCs will be so details regarding storage of Haz k storages only including Name of chemical	rocess vessels, with blower ar end to spent solv ardous chemic g spent acid an Quantity (Nos.)	vent recovery als d spent solve Total (Nos.)	oing and equipment to ondenser as shown plant. ent tanks) Total Qty. to be store (KL)			
H H-1	SAFETY Details r (For tank	torage tanks, venting of p neans of hood connected ollowing diagram. condensed VOCs will be so details regarding storage of Haz k storages only including Name of chemical	rocess vessels, with blower ar end to spent solv ardous chemic g spent acid an Quantity (Nos.) ON PESO – 5 I	als d spent solve Total (Nos.)	oing and equipment to ondenser as shown plant. ent tanks) Total Qty. to be store (KL)			
H H-1	SAFETY Details r (For tanl S.N 1	torage tanks, venting of p heans of hood connected ollowing diagram. condensed VOCs will be so details regarding storage of Haz k storages only including Name of chemical	rocess vessels, with blower ar end to spent solv ardous chemic g spent acid an Quantity (Nos.) ON PESO – 5 I 5 KL	als d spent solve Total (Nos.)	ing and equipment bondenser as shown plant. Total Qty. to be store (KL)			
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Non-PESO	- 5 Nos							
Brief note on stor	age of Hazardous chemicals other than Tanks i.e. Drum. Barrels.							
Carbova Baga at								
Carboys, Bags et								
Satery measures for Drum Storage area: Some chemicals will be received at plant in drums by road truck and stored in a								
 Some chemicals will be received at plant in drums by road truck and stored in a separate drum storage area. 								
✓ FLP type lig	\checkmark FLP type light fittings will be provided.							
 Proper vent 	ilation will be provided in go down.							
✓ Proper labe	and identification board /stickers will be provided in the storage							
✓ Conductive	drum pallets will be provided.							
✓ Drum hand	ling trolley / stackers/fork lift will be used for drum handling. Separate							
dispensing	room with local exhaust and static earthing provision will be made.							
✓ Materials w made for flo	'ill be stored as per its compatibility study and separate area will be							
✓ Smoking ar	and other spark, flame generating item will be banned from the Gate.							
Safety details of H	lazardous Chemicals:							
Type of	Safety measures							
Chemicals								
PESO Tank	Safety Measures for PESO Underground storage tank farm:							
	✓ The underground vessels shall be placed within concrete							
	or brick masonry pit with a gap of 1.0 meter between the							
	vessels							
	✓ The underground vessels shall be installed on a firm							
	foundation and firmly secured to the foundation so as to							
	prevent movement of floatation.							
	road tanker and stored in u/g storage tank as per PESO							
	Rule.							
	✓ Tank farm will be constructed as per explosive							
	department requirement and separation distance will be							
	✓ The underground vessels covered by earth (Mound) shall							
	be a designed to withstand external pressure due to load							
	of the earth cover.							
	 Provided with external anti-corrosive coating or cathodic protection to prevent corrosion ; 							
	 Covered by earth, sand or any other non-corrosive 							
	material free from abrasive particles likely to damage							
	the anti-corrosive coating of the vessel-the thickness							
	of the covering material above the top surface of the							
	 Having the discharge level of the safety relief values at 							
	least 2 meters above the top surface of the vessel, but							
	in any case not less than 3 meters from the ground							
	level;							
	o Filled with the necessary piping's, fillings, valves and other mounting on top of vessel in such a manner that							
	they can be operated and maintained without							
	disturbing the earth cover. In case of above ground							
	vessel with earth cover (mound), liquid outlet pipe at							

the bottom may be allowed provided the control valve
and emergency value of this line is just outside the
and emergency value of this line is just outside the
earth cover for the purpose of operation and
maintenance from outside.
✓ Static earthing provision will be made for road tanker as
well as storage tank
Flame arrester with breather valve will be provided on
vent line.
✓ Road tanker unloading procedure will be prepared and
implemented.
\checkmark Fire load calculation will be done and as per fire load
hydrant system will be provided as per NEPA std. and fire
avtinguishers will be provided as per fire load calculation
extinguisners will be provided as per file load calculation.
\checkmark Spark arrestor will be provided to all vehicles in side
premises
\checkmark Lightening arrestor will be provided on the top.
\checkmark Flame proof type equipment and lighting will be provided
Trained and experience operator will be employed for
 Trained and experience operator will be employed for
tank farm area.
✓ NFPA label (hazard identification) capacity and content
will be displayed on tanks
\checkmark Solvents will be transferred by pump only in plant area
and day tank will be provided. Overflow line will be return
to the store as teals or Duran On Off switch will be
to the storage tank or Pump On-Off switch will be
provided near day tank in plant.
✓ Jumpers will be provided on solvent handling pipe line
flanges & Flexible SS hose will be used for road tanker
unloading purpose and other temp, connection
PESO Area Storage & Handling Safety: (UNLOADING)
PESO Area Storage & Handling Safety: (UNLOADING) ✓ Ensure that the transfer of petroleum takes place only
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	 fuelling and that there is no source of any spark in the area. In case of retail outlets that are in congested areas operations of fuelling automobiles in the retail outlet may be discontinued. ✓ Do not use plastic hose pipes for unloading purposes. ✓ Do not use hose pipe fitted with metallic pipe (bent pipe) at the discharge end. ✓ Do not use Hose pipes not conforming to OISD 135. ✓ Proper tightening of hose connections using screwed/cam lock couplings. ✓ Make sure that there shall be no collection of leaked petroleum through hose pipe connection at tanker discharge faucet end in the plastic bucket kept on the ground below. ✓ Provision of electrical earthing / bonding by means of flexible cable between tanker chassis and earth boss/fill pipe. ✓ Proper training to the retail outlet staff regarding hazards associated with the petroleum road tanker decantation operation in the retail outlets.
Non PESO tank	Safaty massures for Acid storage Tank:
Non PESO tank	 Sarety measures for Acid storage Tank: Storage tank will be stored away from the process plant. Tanker unloading procedure will be prepared and implemented. Caution note and emergency handling procedure will be displayed at unloading area and trained all operators. NFPA label will be provided. Required PPEs like full body protection PVC apron, Hand gloves, gumboot, Respiratory mask etc. will be provided to operator. Neutralizing agent will be kept ready for tackle any emergency spillage. Safety shower, eye wash with quenching unit will be provided in acid storage area. Material will be handled in close condition in pipe line. Dyke wall will be provided. Level gauge will be provided on all storage tanks. Safety permit for loading unloading of hazardous material will be provided to all transporters and will be trained for transportation Emergency of Hazardous chemicals. Fire hydrant system with jockey pump as per TAC norms will be installed.
	 Safety Measures of Non PESO Tank ✓ Leakage / spillage mitigation plan ✓ Tank shall be rubber lined to prevent the corrosion ✓ Dyke wall shall be provided for containment ✓ Rubber type hand gloves and chemical splash goggles and full-face cartridge type mask and PVC apron shall be used while manual handling ✓ Lime shall be readily available during leak to neutralize the spill material ✓ Safety shower, eye wash with quenching unit will be

		 provided in acid storage area. ✓ Material will be handled in close condition in pipe line. ✓ Double drain valve will provided. ✓ Level gauge will be provided on all storage tanks. ✓ Fire hydrant system with jockey pump as per TAC norms will be installed 						
H-2	Applicability of PESO: Will be obtained. Types of hazardous Processes involved and its safety measures: (Hydrogenation process, Sulphonation, Chlorination process, Bromination							
	Type of	Safety measures including Automation						
	Hydrogenatio	DCS base process controls and operation of plant will be installed						
		 All electrical equipment's shall be installed as per Hazardous 						
		Area Classification.						
		Total enclosed process system.						
		Instrument & Plant Air System.						
		Nitrogen blanketing in Hydrogenation reactor.						
		Emergency dumping vessel will be provided during						
		unforeseen circumstances.						
		Safety valve and Rupture disc provided on reactor.						
		been made on reactor						
		 Process area and Hydrogen cylinder bank shall be far away 						
		as per standards practice						
		 PRV station with shut off valve, safety valve provision will be 						
		made for hydrogenation reaction safety.						
		> Standard Operating procedure shall be followed during						
		operation of Hydrogen Gas charging in to reactor and after						
		completion of reaction Nitrogen purging will be done.						
		Flame arrestor will be provided on vent line of reactor and it						
		will be extended above the roof level.						
		Safe Catalyst charging method will be adopted. COD will be displayed and energeters will be trained for the						
		SOP will be displayed and operators will be trained for the						
		 Static earthing and electric earthing (Double) will be provided 						
		 Jumpers for static earthing on pipeline flanges of flammable 						
		chemical will be provided.						
		> Hydrogen gas detector will be installed for early						
		detection of gas leak.						
	Nitration	SOP will be displayed for safe charging of Nitric acid for						
		nitration process						
		Required PPEs like full body protection PVC apron, Hand aloves aumboot Respiratory mask etc. will be provided to						
		operator at time of nitric acid charging.						
		> Make sure the absorber unit (two stage Alkali scrubber) will be						
		working and capable of handling vented NO2 fumes.						
		Neutralizing agent will be kept ready for tackle any emergency spillage						
		 Safety Shower and eve wash will be provided near process 						
	11 2	25 th meeting of SEAC-Guiarat Dated 05 08 2021						

Bromination	 area. Total close process will be adopted (from storage tank to measured vessel & then to reactor) for Nitric Acid charging. Caution note and emergency first aid will be displayed for the same to all employees. First Aid Boxes will be available in process area. Prevention measures for runaway reaction of nitration reaction. Instrumentation control –Interlock, Rotameter, DCS, Level alarms TIC –Temp Indicator Controller- of jacketed reactor (Gradually Charging material to maintain rate of rise of temperature,-Temperature sensor – Chilling Plant, Temp Range of Reaction: 25 to 30 degree centigrade Pressure : Atmospheric) Emergency control measures: Provision of Dumping vessel of the contents of the nitrator underneath reactor; the contents will be neutralized (by Alkali) in catch point. It will be sent to CF (Co-Processing/CHWIF/TSDF). All end nozzles in bromine charging hose will be
	 Shi the instance of a browning those will be blinded after use. Charging of bromine will be done when reactor is in vacuum and POP coated funnel will be used during charging. Excess bromine will be neutralize or discharged by adding Sodium Bisulfite. Make sure the absorber unit (scrubber) is working and capable of handling vented bromine fumes. Structure of bromine bottle area will be periodically inspected to ensure stability. Personnel employed with bromine handling are made aware of potential hazards of bromine and of appropriate first-aid measure. Exhaust hood connected with alkali scrubber and ventilation system will be available. Exhaust hood has been provided to maintain to concentration of bromine vapor well below PEL. Work instructions for bromine charging will be displayed in local language/Hindi. Safety shower and eye-wash fountains will be available nearby handling and charging facility. The location of such item will be inspected and tested at fixed interval to make sure that it is in good condition. Hypo solution, lime water slurry or soda ash solutions will be available so as to pour them over a liquid bromine spill on the source and the store and the source should be available.
Sulphonation	 Available so as to pour memover a liquid bromme split off the floor. The bromine and neutralizer is then washed to the sump with cold water hose. Personal Hygiene – the following personal protective equipment will be used. Chemical safety goggles, face shields, SCBA sets, Aprons, rubber gloves, etc. Only trained employees handled bromine charging. Training will be given to employees for bromine handling and charging. Provision of Safety valve & rapture disc on reactor.
& Chlorination (Only Through	 Provision of auto dumping vessel. Required PPEs like full body protection PVC apron, Hand

TI	nionyl	gloves, gumboot, Respiratory mask etc. will be provided to
Ch	loride)	operator.
		> To avoid runaway reaction, TC charging will be done
		gradually & slowly to avoid runaway reaction, TC
		charging will be done gradually & slowly.
		Charging will be done only through closed line and
		system. Scrubber attached with closed system.
		Make sure the absorber unit (two stage Alkali scrubber)
		is working and capable of handling vented SO2 / HCI
		tumes.
		Neutralizing agent will be kept ready for tackle any omorgoney spillage
		 Safety Shower and eve wash will be provided near process
		area.
		For Thionyl Chloride evacuate area in down wind direction
		up to 0.3 km (300 meter) in small spillage.
		Emergency siren and wind sock will be provided.
		Tele Communication system and mobile phone will be used
		in case of emergency situations for communication.
		> Total close process will be adopted for Thionyl chloride
		charging.
		Caution note and emergency first aid will be displayed and train for the same to all employees.
		First Aid Boxes will be available in process area
		 First Aid boxes will be available in process area. Emergency organization and team will be prepared as per
		On site-Off site emergency planning
		 Emergency team will be prepared and trained for scenario
		base emergency. Like Toxic control team, Fire control team,
		First aid team, communication and general administration
		team, Medical team etc.
		Do not touch damaged containers or spilled material unless
		wearing appropriate protective clothing.
		Use water spray to reduce vapors; do not put water directly
		on leak, spill area or inside container. Keep combustibles
		(wood, paper, oii, etc.) away from spilled material.
		material followed with plastic speet to minimize spreading or
		contact with rain
Chlo	orination	Chlorine Emergency Kit will be procured and kept ready at
Pr	ocess	process site.
s	afety 🔰 🗲	Chlorine Hood with blower will be provided with scrubbing
mea	asures:	arrangement.
(Chlo	rine Gas) 🛛 🗡	SCBA sets will be kept ready at site.
		Safety Shower and eye wash will be provided in process area.
		Chlorine absorption system will be provided. In case of
		chiorine leakage in chiorine shed it will be suck through blower
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	and it will be scrubbed in Gaustic scrubber.
		<ul> <li>Tele Communication system and mobile phone will be used in</li> </ul>
		case of emergency situations for communication
		<ul> <li>First Aid Boxes and Occupational health centre will be made</li> </ul>
		at site.
		Emergency organization and team will be prepared as per On
		site-Off site emergency planning.
		Full body protection suite and other PPEs will be kept ready at
		site

	<ul> <li>➢ Emergency base emerg First aid te team, Medie</li> <li>Evacuate the ai</li> <li>✓ For Chlorin km (400 me evacuate th meters).</li> <li>✓ SOP will be</li> <li>✓ Tonner han area for saf</li> <li>✓ Safety Valv be connecte</li> <li>✓ Safety valve safety valve</li> <li>✓ Flow and te line.</li> <li>✓ Chlorine Ga</li> </ul>	<ul> <li>team will be prepared and trained for scenario gency. Like Toxic control team, Fire control team, eam, Communication and general administration cal team etc.</li> <li>rea in down wind direction</li> <li>te evacuate area in down wind direction up to 0.4 eter) in small spillage and in case of large spillage, he area in down wind direction 3.5 kms (3500</li> <li>e prepared for safe charging of Chlorine tonners.</li> <li>ndling EOT crane will be installed in Chlorine shed fe tonner handling.</li> <li>we will be provided on chlorine header line and it will ed to caustic scrubber.</li> <li>e will be provided on vaporizer header and outlet of a connected to scrubber.</li> <li>emperature controllers will be provided on process as detectors will be provided in process area.</li> </ul>					
H-3	Total Plot Area	14000 0Sg mt					
		14000.004.111					
	Area utilized for plant activity:	770.0 Sq. m.					
	Area utilized for Hazardous	2867 Sq. m.					
	Number of Floors Area	G+2					
	Water requirement for firefighting in KLD :	103040Lit.					
	Water storage tank provided for firefighting in KLD:	5,00,000 Lit.					
	Details of Hydrant Pumps:	Fire water Pump will be available. We will have 01 No's of electrical fire water Pump located at pump house having capacity 4550.0 litres/min and 01 No's of Diesel pump having capacity 4550.0 litres/min. Apart from this we have 01 Nos Jockey Pumps of capacity 1080.0 litres/min which maintains the Fire water Header Pressure at 8.0 kg/cm ²					
	Nearest Fire Station :	Fire Station : Panoli GIDC Fire Station					
	Applicability of Off Site	(Distance from project site: 2.33 km)					
	Emergency Plan						
H-4	Details of Fire NOC/Certificate:						
	Will be Applied						
H-5	Details of Occupational Health Ce	ntre (OHC):					
	Number of permanent Em	ployee : 15					
	Number of Contractual pe	erson/Labour : 20					
	Area provided for OHC:	60.0					
	Number of First Aid Boxes	s: 10					
	Nearest General Hospital	General Hospital : Dahej General					

Name of Antidotes to be store in plant :

- During meeting, Committee noted that PP presented revised product profile with discontinue product namely 5-(4'-Bromomethy1-1,11-biphenyl-2-y1)-1-triphenylmethyl-1H-tetrazole and 2-(1-cyano-3-methyl-butyl)-malonic acid diethyl ester, from where cyanide effluent stream generated. Due to proposal of 271 API and API intermediate products in one group proposed in product profile, there is no change in Water, Air and Hazardous waste management details. PP submitted revised PFR after removal of products from product list.
   Committee found reply submitted by PP was satisfactory.
- Commutee found reply submitted by FF was satisfactory.
- After detailed discussion, Committee unanimously decided to recommend the project to SEIAA, Gujarat for grant of Environment Clearance with the following specific condition:

# SPECIFIC CONDITIONS:

- Project Proponent (PP) shall comply conditions of any subsequent amendment or expansion or change in product mix, after the 30th September 2020, considered as per the provisions in force at that time as mentioned in the Notification vide S.O. 1223 (E) dated 27/03/2020 and its subsequent amendment.
- PP shall carry out proposed project/activities in respect of Active Pharmaceutical Ingredients (API) as per the amended EIA Notification vide S.O. 1223 (E) dated 27/03/2020 and any subsequent amendments.
- 3. PP shall submit six monthly compliance report of Environmental Clearance without fail and the same shall be critically assessed by the regulatory authority.
- 4. PP shall not manufacture more that three-four(3-4) products from product list, at a given point of time as per area adequacy submitted by PP..
- 5. Unit shall obtain all required permissions from the Narcotics Control Bureau for usage of Acetic Anhydride & any such chemicals as raw material, its storage and handling.
- 6. Close loop solvent recovery system with adequate condenser system shall be provided to recover solvent vapours in such a manner that recovery shall be maximum and recovered solvent shall be reused in the process within premises.
- Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines. LDAR Logbooks shall be maintained.
- 8. All measures shall be taken to prevent soil and ground water contamination.
- 9. Unit shall install CEMS [Continuous Emission Monitoring System] in line to CPCB directions to all SPCB vide letter no. B-29016/04/06PCI-1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis. [For Small/Large/Medium (Red Category) & Whichever (Air emission &

Effluent discharge) is applicable].

10. PP shall not dig bore well within premises without permission from CGWA authority and shall procure water from outside market through private water tanker supplier only.

## <u>WATER</u>

- 11. Total water requirement for the project shall not exceed 113.50 KLD. Unit shall reuse 40 KLD of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 73.50 KLD and it shall be met through private water tanker supply only. Prior permission from concerned authority shall be obtained for withdrawal of water.
- 12. The industrial effluent generation from the project shall not exceed 41.50 KLD.
- 13. 32 KLD,Industrial effluent from process shall be treated in solvent stripper and then treated effluent from solvent stripper along with 3.5 KLD effluent from washing and scrubber shall be treated in ETP consist of primary ETP units. Then treated effluent shall be sent to CMEE of M/s BEIL through GPS fitted tanker for evaporation.
- 14. 2 KLD, effluent from utility shall be reused back in for make up water in scrubber after pH adjustment.
- 15. 4 KLD exhausted scrubbing media shall be partly sold to end users having rule- 9 permission and parly shall be reused back in process within premises as per Hazardous Waste Rules'2016.
- 16. Unit shall send wastewater to CMEE only after complying with norms prescribed by GPCB and ensuring content of effluent for COD/VOC so as not to get air borne during evaporation in order to achieve no adverse impacts on Environment and Human Health.
- 17. Domestic wastewater generation shall not exceed 1.20 KL/day for proposed project and it shall be treated in ETP. It shall not be disposed off through soak pit/ septic tank.

### <u>AIR</u>

- 18. Unit shall not exceed fuel consumption and provide APCM and Stack height as mentioned in flue gas matrix.
- 19. Unit shall provide APCM and stack height as mentioned in process gas matrix.
- 20. PP shall use approved fuels only as fuel in boilers.

### HAZARDOUS & SOLID WASTE

- 4. All hazardous solid waste shall be managed as mentioned in hazardous waste matrix.
- 5. The unit shall submit the list of authorized end users of hazardous wastes along with MoU signed with them at least two months in advance prior to the commencement of production. In the absence of potential buyers of these items, the unit shall restrict the production of the respective items.

### **GREENBELT AREA**

6. The PP shall develop green belt within premises (4620 Sq m i.e. 33 % of the total plot area) as per the

undertaking submitted before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.

### 7. Safety & Health:

- a) PP shall obtain PESO permission for the storage and handling of hazardous chemicals.
- b) PP shall provide Occupational Health Centre (OHC) as per the provisions under the Gujarat Factories Rule 68-U.
- c) PP shall obtain fire safety certificate / Fire No-Objection certificate (NOC) from the concern authority as per the prevailing Rules / Gujarat Fire Prevention and Life Safety Measures Act, 2016.
- d) Unit shall adopt functional operations/process automation system including emergency response to eliminate risk associated with the hazardous processes.
- e) PP shall carry out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in the manufacturing area in case of any emergency or accident.
- f) PP shall install adequate fire hydrant system with foam trolley attachment within premises and separate storage of water for the same shall be ensured by PP.
- g) PP shall take all the necessary steps for control of storage hazards within premises ensuring incompatibility of storage raw material and ensure the storage keeping safe distance as per the prevailing guidelines of the concerned authority.
- h) PP shall take all the necessary steps for human safety within premises to ensure that no any harm is caused to any worker/employee or labour within premises.
- i) Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.
- j) Unit shall never store drum/barrels/carboys of incompatible material/chemical together.
- k) Unit shall provide effective Isolation for Process area and storage of hazardous chemicals.
- I) Unit shall provide safety valve & rupture disc to the Hydrogenation vessel.
- m) Unit shall provide effective fire hydrants, water monitors & foam application system at solvent storage tank farm area. Unit shall provide adequate safety system such as water sprinklers, water curtains, foam pouring system etc. to restrict cascade fire emergency in solvent tank farm.
- n) Unit shall Store Bromine Bottle in cool dry separate area, out of direct sunlight.
- O) Unit shall provide chlorine leakage control emergency kit and FRP hood with scrubber system for chlorine safety.
- p) Unit shall provide safety valve and rapture disc, as well as auto dump or auto quench/, suppress system for nitration vessel safety.

11.	SIA/GJ/IND2/205560/2021	M/s. Gujarat Amines	EC-Reconsideration
		Plot No 2107, Panoli Industrial Estate– 394116, Tal- Ankleshwer, Dist: Bharuch	

#### Category of the unit: 5(f)

#### Project status: Expansion

- Project proponent (PP) submitted online application vide no. SIA/GJ/IND2/205560/2021on dated 27/03/2021 for obtaining Environmental Clearance.
- Project proponent has submitted Form 1, Pre-Feasibility Report & Environment Management Plan as per Notification issued by MoEF&CC vide S.O. 1223(E) dated 27th March, 2020 regarding consideration of proposals or activities in respect of Active Pharmaceuticals Ingredients (API) as B2 category.
- This is an existing unit and proposes for expansion in manufacturing of synthetic organic chemicals [API and API Intermediates] as tabulated below,

		API			Quantity	'	
Sr.	NAME OF PRODUCT	Or Cas No		MT/Month			Said API is used for/End
No.		Intermediat		Exis	Prop	Tota	Use of said API
		е		ting	osed	I	
			Existing		I		
1.	Glycerol monostearate	-	123-94-4				Food additive
2.	Butyl Stearate	-	123-95-5				Plastic additive
3.	Sorbitan Mono Sterate	-	1338-41-6	50	-	50	Food additive
4.	Calcium propionate	-	4075-81-4				Food additive
5.	Calcium Acetate	-	62-54-4				Food additive
6.	Zinc Stearate	-	557-05-1				Plastic additive
7.	Phenyl Acetone	Intermediat es	103-79-7	25	-	25	Amphetamine/ increase your ability to pay attention, stay focused on an activity, and control behavior problems

			-			
						To manufacture
						benzyl cynide whichis
		Intermediat				used to manufacture
8.	Benzyl Chloride	es	100-44-7			2-phenylacetamide
						Penicillin G/ to treat
						patient with epilepsy
						Used as antibiotic
9.	Calcium Stearate	-	1592-23-0			Plastic additive
						Hydro Quise Butyl
						Bromide/ To treat
	N-Butvl Bromide	Intermediat	2398-37-0			crampy abdominal
10.		es				pain, esophageal
						spasms, renal colic, and
						bladder spasms
11.	Magnesium Stearate	-	557-04-0			Plastic additive
		Proposed		1		
			40.4500			API/ improve
12	Atorvastatin Calcium	API	134523-			Cholesterol level and
12.			00-5			fats
	Tetra-butyl 2-((4R,6R)-					
	6-(2-aminoethyl)-2,2-	Intermediat	125995-			
13.	dimethyl-1,3-dioxan-4-	е	13-3			
	yl)acetate					
	Tert-butyl 2-((4R,6R)-					Atorvastatin Calcium
	6-(2-(4-					/Improve Cholesterol
	fluorophenyl)-5-					level and fats
	isopropyl-3-phenyl-4-	Intermediat	125971-	-	25	
14.	(phenylcarbamoyl)-1H-	е	95-1			
	pyrrol-1-yl)ethyl)-2,2-					
	vl)acetate					
	Jijacolalo					
	<b>T</b>		56211-40-			API/Heart failure, liver
15.	Iorsemide	API	6			disease, and kidney
						UISEASE
	2-	Intermediat				Torsemide /Heart
16.	aminobenzenesulfonic	e	88-21-1			tailure, liver disease,
	acia					and kidney disease

I	A-chloropyriding 2	Intermediat	18269 64
17.	sulfonamide	e	4
18.	4-(m- tolylamino)pyridine-3- sulfonamide	Intermediat e	72811-73- 5
19.	Bisoprolol Fumarate	API	66722-44- 9
20.	4-((2- isopropoxyethoxy) methyl)phenol	Intermediat e	177034- 57-0
21.	2-((4-((2- isopropoxyethoxy) methyl)phenoxy)methyl )oxirane	Intermediat e	66722-57- 4
22.	1-(4-((2- isopropoxyethoxy) methyl)phenoxy)-3- (isopropylamino)propa n-2-ol	Intermediat e	5790-46-5
23.	Artesunate	API	88495-63- 0
24.	Lumefantrine	API	82186-77- 4
25.	2-chloro-1-(2,7- dichloro-9H-fluoren-4- yl)ethane-1-ol	Intermediat e	131023- 37-5
26.	2-chloro-1-(2,7- dichloro-9H-fluoren-4- yl)ethane-1-ol	Intermediat e	131023- 37-5
27.	2-(dibutylamino)-1- (2,7-dichloro-9H- fluoren-4-yl)ethane-1- ol	Intermediat e	69759-61- 1
28.	Dabigatran	API	211915- 06-9

29.	(4-Cyano- phenylamino)acetic acid	Intermediat e	42288-26- 6		
30.	3-({2-[(4-cyano- phenylamino)-methyl]- 1-methyl-1H- benzoimidazole-5- carbonyl}-pyridine-2-yl- amino)-propionic acid ethyl ester methane sulfoate	Intermediat e	211915- 84-3		
31.	3-({2-[(4- carbamimidoyl- phenylamino)-methyl]- 1-methyl-1H- benzoimidazole-5- carbonyl}-pyridine-2-yl- amino)-propionic acid ethyl ester hydrogen chloride	Intermediat e	7647-01-0		Dabigatran /preve blood clots
32.	3-[(2-{[4- (Hexyloxycarbonylamin o-imino-methyl)- phenylamino)-methyl}- 1-methyl-1H- benzoimidazole-5- carbonyl)-pyridine-2-yl- amino]-propionic acid ethyl ester	Intermediat e	211915- 06-9		
33.	Strontium Renelate	API	135459- 90-4	-	API /Osteoporosi
34.	Diethyl 3- oxopentanedioate	Intermediat e	105-50-0		
35.	Ethyl 5-amino-4-cyano- 3-(2-ethoxy-2- oxoethyl)thiophene-2- carboxylate	Intermediat e	58168-20- 0		Strontium Renelat
36.	diethyl 2,2'-((3-cyano- 4-(2-ethoxy-2- oxoethyl)-5- (ethoxycarbonyl)thioph en-2- yl)azanediyl)diacetate	Intermediat e	58194-26- 6		Usteoporosis

37.	PhenylepherineHCl	API	61-76-7	API /stuffy nose, sinus and ear symptoms
38.	3-acetylphenyl acetate	Intermediat e	2454-35-5	
39.	3-(2- bromoacetyl)phenyl acetate & 2- (benzyl(methyl)amino- 1-(3- hydroxyphenyl)ethane- 1-one	Intermediat e	38396-89- 3 & 71786-67- 9	PhenylepherineHCl /stuffy nose, sinus, and ear symptoms
40.	3-(1-hydroxy-2- (methylamino)ethyl)ph enol	Intermediat e	532-38-7	
41.	AzilsartanKamedoxomi I	API	863031- 21-4	API /high blood pressure
42.	Methyl(E)-2-ethoxy-1- ((2'-(N'- ((ethoxycarbonyl)oxy)c arbamimidoyl-[1,1- biphenyl]-4-yl)methyl)- 1H-benzo[d]imidazole- 7-carboxylate	Intermediat e	147403- 65-4	
43.	Methyl 2-ethoxy-1-((2'- (5-oxo-4,5-dihydro- 1,2,4-oxadiazol-3-yl)- [1,1-biphenyl]-4- yl)methyl)-1H- benzo[d]imidazole-7- carboxylate	Intermediat e	147403- 52-9	AzilsartanKamedoxomi /high blood pressure
44.	Methyl 2-ethoxy-1-((2'- (5-oxo-4,5-dihydro- 1,2,4-oxadiazol-3-yl)- [1,1-biphenyl]-4- yl)methyl)-1H- benzo[d]imidazole-7- carboxylic acid	Intermediat e	147403- 52-9	

(G-methyl-2-coxo-1,3- dioxol-4,yl)methyl 2- ethoxy-1-((2°-(5-oxo- 4,5-dihydro-1,2,4- oxadiazol-3-yl)[1,1- biphenyl]-4-yl)methyly- 1H-benzo[d]midazole- 7-carboxylateIntermediat e963031- 21-446.Rosuvastatin CalciumAPI147098- 20-2API/ Lowers "back of the constraints" cholesterol46.Rosuvastatin CalciumAPI147098- 20-2Constraints47.N-[5-(bromo methyl)-6- (sopropyl pyrimidin-2- yl]-N-methyl methyl ethorsIntermediat e79842- 07-247.Tert-butyl2-((4R,6S)-6- ((E)-2-(4.4- flurophenyl)-6- isopropyl-2:(N- methylmethylsutionami do) pyrimidin-2- yl)vinyl)-2,2-dimethyl- 1,3-dioxan-4-yl)acetateIntermediat e289042- 12-248.Tert-butyl2-((4R,6S)-6- ((E)-2-2-(N-4- flurophenyl)-6- isopropyl-2:(N- methylmethylsutionami do) pyrimidin-5- eIntermediat e287714- 41-449.of rosuvastatine23672-07- 350.LevosulpirideAPI e23672-07- 351.2-methoxybenzoic acid ee579-75-9 752.2-methoxy-5- sulfamoylbenzoic acid eIntermediat e22171-85- 753.Sulfamoylbenzolate aminomethyl pyroindineIntermediat e22795-99- 954.TelmisartanAPI 48-4144701- 48-4				
46.Rosuvastatin CalciumAPI147098- 20-247.N-[5-(bromo methyl)-4- (4-fluoro phenyl)-6- isopropyl pyrimidin-2- yl]-N-methyl methane sulfonamide.TPP saltIntermediat e799842- 07-247.Tert-butyl2-((4R,6S)-6- ((E)-2-(4-(4- flurophenyl)-6- isopropyl-2:(N- methylmethylsulfonami d) pyrimidin-5- yl]vinyl)-2.2-dimethyl- 1,3-dioxan-4-yl]acetateIntermediat e289042- 12-248.Tert-butyl2-((AR,6S)-6- ((E)-2-(4-(4- flurophenyl)-6- isopropyl-2:(N- methylmethylsulfonami d) pyrimidin-5- yl]vinyl)-2.2-dimethyl- 1,3-dioxan-4-yl]acetateIntermediat e289042- 12-249.monomethylamine salt of rosuvastatinIntermediat e287714- 41-450.LevosulpirideAPI e23672-07- 351.2-methoxy-5- sulfamoylbenzoic acidIntermediat e579-75-952.sulfamoylbenzoic acidIntermediat e22117-85- 753.Sulfamoylbenzoic acidIntermediat e22795-99- 954.S-1-Ethyl-2- aminomethyl pyrolindineIntermediat e22795-99- 954.TelmisartanAPI144701- 48-4	45.	(5-methyl-2-oxo-1,3- dioxol-4-yl)methyl 2- ethoxy-1-((2'-(5-oxo- 4,5-dihydro-1,2,4- oxadiazol-3-yl)-[1,1- biphenyl]-4-yl)methyl)- 1H-benzo[d]imidazole- 7-carboxylate	Intermediat e	863031- 21-4
N-[5-(bromo methyl)-4- (4-fluoro phenyl)-6- isopropyl pyrimidin-2- yl]-N-methyl methane sulfonamide.TPP saltIntermediat e799842- 07-2Tert-butyl2-((4R,6S)-6- ((E)-2-(4-(4- flurophenyl)-6- isopropyl-2-(N- methylmethylsulfonami do) pyrimidin-5- yl]vinyl)-2.2-dimethyl- 1,3-dioxan-4-yl]acetateIntermediat e289042- 12-248.Tert-butyl2-((4R,6S)-6- ((E)-2-(4-(4- flurophenyl)-6- isopropyl-2-(N- methylmethylsulfonami do) pyrimidin-5- yl]vinyl)-2.2-dimethyl- 1,3-dioxan-4-yl]acetateIntermediat e289042- 12-249.monomethylamine salt of rosuvastatinIntermediat e287714- 41-450.LevosulpirideAPI 	46.	Rosuvastatin Calcium	API	147098- 20-2
Tert-butyl2-((4R,6S)-6- ((E)-2-(4-(4- flurophenyl)-6- isopropyl-2-(N- 	47.	N-[5-(bromo methyl)-4- (4-fluoro phenyl)-6- isopropyl pyrimidin-2- yl]-N-methyl methane sulfonamide.TPP salt	Intermediat e	799842- 07-2
monomethylamine salt of rosuvastatinIntermediat e287714- 41-449.of rosuvastatine24714- 41-450.LevosulpirideAPI23672-07- 351.2-methoxybenzoic acidIntermediat e579-75-9 e52.2-methoxy-5- sulfamoylbenzoic acidIntermediat e22117-85- 753.Methyl 1,2-methoxy-5- sulfamoylbenzolateIntermediat e22795-99- 954.S-1-Ethyl-2- aminomethyl pyrolindineIntermediat e22795-99- 955.TelmisartanAPI144701- 48-4	48.	Tert-butyl2-((4R,6S)-6- ((E)-2-(4-(4- flurophenyl)-6- isopropyl-2-(N- methylmethylsulfonami do) pyrimidin-5- yl)vinyl)-2,2-dimethyl- 1,3-dioxan-4-yl)acetate	Intermediat e	289042- 12-2
50.LevosulpirideAPI23672-07- 350.LevosulpirideAPI23672-07- 351.2-methoxybenzoic acidIntermediat e579-75-952.2-methoxy-5- sulfamoylbenzoic acidIntermediat e22117-85- 753.Methyl 1,2-methoxy-5- sulfamoylbenzolateIntermediat e33045-52- 254.S-1-Ethyl-2- aminomethyl pyrolindineIntermediat e22795-99- 955.TelmisartanAPI144701- 48-4	49.	monomethylamine salt of rosuvastatin	Intermediat e	287714- 41-4
51.2-methoxybenzoic acidIntermediat e579-75-9 e52.2-methoxy-5- sulfamoylbenzoic acidIntermediat e22117-85- 753.Methyl 1,2-methoxy-5- sulfamoylbenzolateIntermediat e33045-52- 253.S-1-Ethyl-2- aminomethyl 	50.	Levosulpiride	API	23672-07- 3
2-methoxy-5- sulfamoylbenzoic acidIntermediat e22117-85- 752.Sulfamoylbenzoic acide753.Methyl 1,2-methoxy-5- 	51.	2-methoxybenzoic acid	Intermediat e	579-75-9
53.Methyl 1,2-methoxy-5- sulfamoylbenzolateIntermediat e33045-52- 253.S-1-Ethyl-2- 	52.	2-methoxy-5- sulfamoylbenzoic acid	Intermediat e	22117-85- 7
54.S-1-Ethyl-2- aminomethyl pyrolindineIntermediat e22795-99- 9955.TelmisartanAPI144701- 48-4API/high blood press	53.	Methyl 1,2-methoxy-5- sulfamoylbenzolate	Intermediat e	33045-52- 2
55.TelmisartanAPI144701- 48-4API/high blood pres	54.	S-1-Ethyl-2- aminomethyl pyrolindine	Intermediat e	22795-99- 9
	55.	Telmisartan	API	144701- 48-4

	Methyl 4-butyramido-3-	Intermediat	301533-		
56.	methylbenzoate	е	59-5		
	Methyl 4-butyramido-3-	Intermediat	152628-		
57.	methyl-5-nitrobenzoate	е	01-8		
	Methyl 7-methyl-2-				Telmisartan/high blood
	propyl-1H-	Intermediat	152628-		pressure
58.	benzo[d]imidazole-5-	е	00-7		
	carboxylate				
	7-methyl-2-propyl-1H-	Intermediat	152628-		
59.	benzo[d]imidazole-5-	е	00-7		
	carboxylic acid				
<u> </u>	QuitiapineHemifumarat	API	111974-		API /schizophrenia,
60.	e		69-7		bipolar disorder
	2-nitro thio phenol	Intermediat	4875-10-9		
61.		е	4070-10-0		
	Phenyl-2-(phenylthio)	Intermediat	1124 04 7		
62.	amine	е	1134-94-7		QuitiapineHemifumara
	Phenyl-2-(phenylthio)-	Intermediat	111974-		/schizophrenia, bipola
63.	phenyl carbonate	e	73-3		
	Dibonzolh flthiazonin-	Intermediat			
64.	1.1(10H)-one	e	3159-07-7		
	.,.(,				
65	Carvedilol	API	72956-09-		API/treat high blood
05.			3		pressure
	1,2,3,4-	Intermediat	15128-52-		
66.	tetrahydrocarbazol-4-	е	6		
	one				Com (adilal/two at high
<b>a</b> -	4-hydroxy-9-(H)	Intermediat	52602-39-		blood pressure
67.	carbazole	е	8		
	4-oxyranylmethoxy-9-	Intermediat	51997-51-		
68.	(H)-carbazole	е	4		
	ClanidagraDiaulahata		120202-		API/treat new/worsenir
69.	CiopidogreiBisulphate	API	66-6		chest pain
	2-(thiophen-2-	Intermediat			
70.	yl)ethanol	е	540∠-55-1		treat new/worsening
	<i>,</i> ,				treat new/worsening

	2-(Thiophon-2 yllothyl			chast pain
71.	4- methylbenzenesulfonat e	Intermediat e	40412-06- 4	chest pain
72.	(S)-Methyl 2-(2- chlorophenyl)- 2-((2- (thiophen-2- yl)ethyl) amino)acetate hydrochloride	Intermediat e	141109- 19-5	
73.	(S)-Methyl 2-(2- chlorophenyl)-2-(6,7- dihydrothieno [3,2- c]pyridin-5(4H)- yl)acetate sulfate	Intermediat e	120202- 71-3	
74.	Pregabalin	API	148553- 50-8	API/ treat neuropathic pain and fibromyalgia.
75.	2-(3-Methyl- butylidene)-melonic acid diethyl ester	Intermediat e	86369-44- 0	
76.	2-(1-cyan0-3-methyl- butyl)-malonic acid diethyl ester	Intermediat e	186038- 82-4	Pregabalin/ treat
77.	3-aminomethyl 5- methyl hexanoic acid	Intermediat e	148553- 50-8	fibromyalgia.
78.	s(+)Pregabalinmandala te salt	Intermediat e	4118-51-8	
79.	Levocetirizine Dihydrochloride	API	130018- 77-8	API/relieve allergy symptoms
80.	1-Methanesulfonyl-4- methylbenzene,( 2- chloro-ethyl)- chloromethylamine	Intermediat e	1671-18-7	LevocetrizineDihydrochl oride/ relieve allerav
81.	1-[(4-Chloro-phenyl)- phenyl-methyl]-4- (toluene-4-sulfonyl)- piperazine	Intermediat e	163837- 56-7	symptoms

82.	1-[(4-Chloro-phenyl)- phenyl -methyl]- piperazine	Intermediat e	38212-33- 8
83.	1-{4-[(4-Chloro- phenyl)-phenyl - methyl]-piperazin-1-yl}- ethanol	Intermediat e	109806- 71-5
84.	Moxifloxacin HCl	API	186826- 86-8
85.	5H-pyrrolo [3,4- b]pyridine-5,7(6H)- dione	Intermediat e	4664-00-0
86.	8-benzyl-7,9-dione-2,8- diazabicyclo[4.3.0]non ane	Intermediat e	NA
87.	Cis-8-benzyl-7,9- dione-2,8- diazabicyclo[4.3.0]non ane	Intermediat e	NA
88.	(4aS,7aS)-Octahydro-1H- pyrrol[3,4-b]pyridine	Intermediat e	151213- 40-0
89.	Amisulpiride	API	53583-79- 2
90.	Topiramate	API	97240-79- 4
91.	2, 3,4, 5-Bis-O-(1- MethylEthylidene)-B-D- fructopyranose	Intermediat e	20880-92- 6
92.	Levitiracetam	API	102767- 28-2
93.	Azithromycin dihydrate	API	117772- 70-0
94.	Irbesartan	API	138402- 11-6

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95.	4'-(2-Butyl-4-oxo-1,3- diazaspiro[4,4]non-1- ene-3-yl methyl)biphenyl-2- carbonitrile	Intermediat e	138401- 24-8		Irbesartan / Antihypertensive
96.	2-n-butyl-4-spiro cyclopenetrate-1-((2'- triphenyl methyl tetrazol-5-yl) biphenyl- 4-yl methyl)-2- imidazole	Intermediat e	124751- 00-4		Irbesartan / Antihypertensive
97.	Flurbiprofen	API	5104-49-4	-	API/Painkiller
98.	Cloxacillin Sodium	API	7081-44-9		API/Antibiotic
99.	Terbinafine Hydrochloride	API	78628-80- 5	-	API/Antifungal
100.	Terbinafine	Intermediat e	91161-71- 6	-	Terbinafine Hydrochloride/ Antifungal
101.	Azithromycin	API	83905-01- 5	-	API/Antibiotic
102.	Roxithromycin	API	80214-83- 1	-	API/Antibiotic
103.	Tramadol Hydrochloride	API	36282-47- 0	-	API/Painkiller
104.	Ornidazole	API	16773-42- 5	-	API/Antiprotozoal
105.	Des Loratadine	API	100643- 71-8	-	API/Anti-Allergic
106.	Fexofenadine Hydrochloride	API	153439- 40-8		API /Anti-Allergic
107.	4-(4- (hydroxydiphenylmethy I)piperidin-1-yl)-1-(4-(2- methyl-3-oxobutan-2- yl)phenyl)butan)-1-one	Intermediat e	153439- 40-8		Fexofenadine Hydrochloride/ Anti- Allergic
108.	Sertraline Hydrochloride	API	79559-97- 0	-	API/Antidepressant

	(4-(3,4-dicholoro-				
109.	tetrahydro-naphthalen- 1-ylidene)-methyl- amine	Intermediat e	1198084- 29-5		Sertraline Hydrochloride /Antidepressant
110.	Silodosin	API	160970- 54-7		API/ to treat signs and symptoms of an enlarged prostate gland
111.	Clarithromycin	API	81103-11- 9		API/Antibiotic
112.	Lisinopril	API	83915-83- 7		API/Antihypertensive
113.	Arteether	API	75887-54- 6		API/Antimalerial
114.	Gabapentin	API	60142-96- 3		API/ Antidepressant
115.	(1-aminomethyl- cyclohexyl)-acetic acid	Intermediat e	60142-95- 2		Gabapentin / Antidepressant
116.	Hydrochlorothiazide	API	58-93-5		API /Antihypertensive
117.	Atenolol	API	29122-68- 7		API/Antihypertensive
118.	Domperidone	API	57808-66- 9		API/Antiemetic
119.	Amoxicillin Trihydrate	API	61336-70- 7		API/Antibiotic
120.	Venlafaxine Hydrochloride	API	99300-78- 4		API/Antidepressant
121.	Donepezil Hydrochloride	API	120011- 70-3		API/Antidepressant
122.	Celecoxib	API	169590- 42-5		API /pain or inflammation
123.	4,4,4-trifluoro-1-(4- methyl phenyl) butano- 1,3-diono	Intermediat e	720-94-5		Celecoxib/pain or inflammation
124.	Pantoprazole Sodium	API	138786- 67-1		API/stomach and esophagus problems

125.	(2-(chloromethyl)-3,4- dimethoxypyridine hydrochloride	Intermediate	72830-09- 2			
126.	Panto-I (Sulphide)	Intermediate	139-66-2			Pantoprazole Sodi
127.	Panto-2 (Sulphoxide) (5- (difluoromethoxy)- 2- {[3,4- dimethoxypyridin- 2- yl)methyl] thio}-1H2 benzimidazole	Intermediate	102625- 64-9			/stomach and esophagus probler
128.	Gliclazide	API	21187-98- 4			API/ to treat type diabetes
129.	OlmesartanMedoximil	API	144689- 63-4	•		API/ Treatment of hypertention
130.	TritylOlmesartanMedox imil	Intermediate	14690-92- 6			OlmesartanMedoxi Treatment of hypertention
131.	(Methylcobalamin) Vitamin B12	API	13422-55- 4			API/ treat vitamin B12 deficie
132.	Bromhexine HCI	API	611-75-6			API/used in a condi where there is a lo thick phlegm in th airways
133.	N-(2-nitrobenzyl)-N- Methyl Cyclohexyl amine	Intermediate	80638-08-0			Bromhexine HCI/use a condition where th is a lot of thick phle
134.	Bromhexine	Intermediate	3572-43-8			in the airways
135.	Bronopol	API	52-51-7			API/ antimicrobia
136.	Niclosamide	API	50-65-7			API/to treat broad or tapeworm, dward tapeworm, and be tapeworm infection
137.	3,5-Dimethyl-4-Nitro Pyridine -N- Oxide (OME Nitro)	Intermediate	14248-66-9			Omeprazole/ to tre and prevent the ret of ulcers caused by certain type of bact
138.	4,6-Dichloro pyrimidine	Intermediate	1193-21-1			Erythromycin

139.	Pyrimidine-4,6 diol	Intermediate	1193-24-4				Oxime/bacteriostatic antibiotic drug
140.	Meloxicam	API	71125-38- 7				API/to treat arthritis
141.	2-Amino-5- methylthiazole	Intermediate	7305-71-7				Meloxicam/ to treat
142.	Methyl 4-hydroxy-2H- 1, 2-benzothiazine-3- carboxylate 1,1-dioxide	Intermediate	35511-14- 9				arthritis
	R&D*			-	0.1M T/Mo nth	0.1 MT/ Mon th	
	Total (Existing + Propose	ed)		75.0 MT/ Mon th	-	75.0 MT/ Mon th	

Note: After Expansion production capacity will be remain unchanged. Addition product of API- Bulk Drug & its intermediates only.

# Brief Note of Product Profile:

- No of Manufacturing Plants: 1 no. (After expansion, Production will be remain unchanged)
- Brief Note regarding number of Products to be manufactured considering plant capacity:
  - At a time 3-4 Product will be manufacturing.
  - Considering manufacturing Plant capacity: 2.7Ton/Day.
     <u>ENDUSE OF PRODUCTS</u>

		Type/	In c	ase of Intern stage of Al	nediate ⊃I				
NAME OF PRODUCT	CAS No.	Category of Product (API/ Intermedi ate)	Sta ge i.e. n- 1,n -2, etc.	Name of API in which Intermedi ate Used/ End use of said Intermedi	CAS no. (API)	Said API is used for/End Use of said API			
				ate					
Existing									

1.	Glycerol monostearate	123- 94-4	NA	NA	NA	NA	Food additive
2.	Butyl Stearate	123- 95-5	NA	NA	NA	NA	Plastic additive
3.	Sorbitan Mono Sterate	1338- 41-6	NA	NA	NA	NA	Food additive
4.	Calcium propionate	4075- 81-4	NA	NA	NA	NA	Food additive
5.	Calcium Acetate	62-54- 4	NA	NA	NA	NA	Food additive
6.	Zinc Stearate	557- 05-1	NA	NA	NA	NA	Plastic additive
7.	Phenyl Acetone	103- 79-7	Intermedi ates	n-1	Ampheta mine	2706- 50-5	Amphetamine/ incre ase your ability to pay attention, stay focused on an activity, and control behavior problems
8.	Benzyl Chloride	100- 44-7	Intermedi ates	n-1	benzyl cynide which is used to manufact ure 2- phenylac etamide Penicillin G	103- 81-1	To manufacture benzyl cynide which is used to manufacture 2-phenylacetamide Penicillin G/ to treat patient with epilepsy Used as antibiotic
9.	Calcium Stearate	1592- 23-0	NA	NA	NA	NA	Plastic additive
10.	N-Butyl Bromide	2398- 37-0	Intermedi ates	n-1	Hydro Quise Butyl Bromide	149- 64-4	Hydro Quise Butyl Bromide/ To treat crampy abdominal pain, esophageal spasms, renal colic, and bladder spasms
11.	Magnesium Stearate	557- 04-0	NA	NA	NA	NA	Plastic additive

			Propos	sed		Proposed											
12.	Atorvastatin Calcium	13452 3-00-5	API	n	-	-	API/ improve Cholesterol level and fats										
13.	Tetra-butyl 2-((4R,6R)-6- (2-aminoethyl)-2,2- dimethyl-1,3-dioxan-4- yl)acetate	12599 5-13-3	Intermedi ate	n-2	Atorvasta tin Calcium	13452 3-00-5											
14.	Tert-butyl 2-((4R,6R)-6-(2- (2-(4-fluorophenyl)-5- isopropyl-3-phenyl-4- (phenylcarbamoyl)-1H- pyrrol-1-yl)ethyl)-2,2- dimethyl-1,3-dioxan-4- yl)acetate	12597 1-95-1	Intermedi ate	n-1	Atorvasta tin Calcium	13452 3-00-5	/Improve Cholesterol level and fats										
15.	Torsemide	56211 -40-6	API	N	-	-	API/Heart failure, liver disease, and kidney disease										
16.	2-aminobenzenesulfonic acid	88-21- 1	Intermedi ate	n-3	Torsemid e	56211 -40-6	Tana ani da Alband										
17.	4-chloropyridine-3- sulfonamide	18368 -64-4	Intermedi ate	n-2	Torsemid e	56211 -40-6	failure, liver disease, and kidney disease										
18.	4-(m-tolylamino)pyridine- 3-sulfonamide	72811 -73-5	Intermedi ate	n-1	Torsemid e	56211 -40-6											
19.	Bisoprolol Fumarate	66722 -44-9	API	N	-	-	API/High blood pressure, heart attacks, and kidney problems										
20.	4-((2-isopropoxyethoxy) methyl)phenol	17703 4-57-0	Intermedi ate	n-3													
21.	2-((4-((2- isopropoxyethoxy) methyl)phenoxy)methyl)o xirane	66722 -57-4	Intermedi ate	n-2	Bisoprolo I Fumarate	66722 -44-9	Bisoprolol Fumarate /High blood pressure, heart attacks, and										
22.	1-(4-((2- isopropoxyethoxy) methyl)phenoxy)-3- (isopropylamino)propan- 2-ol	5790- 46-5	Intermedi ate	n-1	Fumarate		kidney problems										

	23.	Artesunate	88495 -63-0	API	Ν			Artesunate /Antimalerial
	24.	Lumefantrine	82186 -77-4	API	N			API /treat non-severe malaria. This medication is used only to treat malaria
	25.	2-chloro-1-(2,7-dichloro- 9H-fluoren-4-yl)ethane-1- ol	13102 3-37-5	Intermedi ate	n-3	Lumefant rine	82186 -77-4	Lumefantrine /treat
	26.	2-chloro-1-(2,7-dichloro- 9H-fluoren-4-yl)ethane-1- ol	13102 3-37-5	Intermedi ate	n-2	Lumefant rine	82186 -77-4	non-severe malaria. This medication is used only to treat malaria
	27.	2-(dibutylamino)-1-(2,7- dichloro-9H-fluoren-4- yl)ethane-1-ol	69759 -61-1	Intermedi ate	n-1	Lumefant rine	82186 -77-4	
	28.	Dabigatran	21191 5-06-9	API	Ν	-	-	API /prevent blood clots
-	29.	(4-Cyano-phenylamino) acetic acid	42288 -26-6	Intermedi ate	n-4	Dabigatra n	21191 5-06-9	
	30.	3-({2-[(4-cyano- phenylamino)-methyl]-1- methyl-1H- benzoimidazole-5- carbonyl}-pyridine-2-yl- amino)-propionic acid ethyl ester methane sulfoate	21191 5-84-3	Intermedi ate	n-3	Dabigatra n	21191 5-06-9	Dabigatran /prevent blood clots
	31.	3-({2-[(4-carbamimidoyl- phenylamino)-methyl]-1- methyl-1H- benzoimidazole-5- carbonyl}-pyridine-2-yl- amino)-propionic acid ethyl ester hydrogen chloride	7647- 01-0	Intermedi ate	n-2	Dabigatra n	21191 5-06-9	

32.	3-[(2-{[4- (Hexyloxycarbonylamino- imino-methyl)- phenylamino)-methyl}-1- methyl-1H- benzoimidazole-5- carbonyl)-pyridine-2-yl- amino]-propionic acid ethyl ester	21191 5-06-9	Intermedi ate	n-1	Dabigatra n	21191 5-06-9		
33.	Strontium Renelate	13545 9-90-4	API	n	-	-	API /Osteoporosis	
34.	Diethyl 3- oxopentanedioate	105- 50-0	Intermedi ate	n-3				
35.	Ethyl 5-amino-4-cyano-3- (2-ethoxy-2-oxoethyl) thiophene-2-carboxylate	58168 -20-0	Intermedi ate	n-2	Strontium Renelate	13545 9-90-4	Strontium Renelate / Osteoporosis	
36.	diethyl 2,2'-((3-cyano-4- (2-ethoxy-2-oxoethyl)-5- (ethoxycarbonyl)thiophen- 2-yl)azanediyl)diacetate	58194 -26-6	Intermedi ate	n-1				
37.	Phenylepherine HCI	61-76- 7	API	N	-	-	API /stuffy nose, sinus, and ear symptoms	
38.	3-acetylphenyl acetate	2454- 35-5	Intermedi ate	n-3				
39.	3-(2-bromoacetyl)phenyl acetate & 2-(benzyl(methyl)amino-1- (3-hydroxyphenyl)ethane- 1-one	38396 -89-3 & 71786 -67-9	Intermedi ate	n-2	Phenylep herine HCl	61-76- 7	Phenylepherine HCI /stuffy nose, sinus, and ear symptoms	
40.	3-(1-hydroxy-2- (methylamino)ethyl)pheno I	532- 38-7	Intermedi ate	n-1				
41.	Azilsartan Kamedoxomil	86303 1-21-4	API	N	-	-	API /high blood pressure	

42.	Methyl(E)-2-ethoxy-1-((2'- (N'-((ethoxycarbonyl) oxy)carbamimidoyl-[1,1- biphenyl]-4-yl)methyl)-1H- benzo[d]imidazole-7- carboxylate	14740 3-65-4	Intermedi ate	n-4	Azilsarta n Kamedox omil	86303 1-21-4	AzilsartanKamedoxo
43.	Methyl 2-ethoxy-1-((2'-(5- oxo-4,5-dihydro-1,2,4- oxadiazol-3-yl)-[1,1- biphenyl]-4-yl)methyl)-1H- benzo[d]imidazole-7- carboxylate	14740 3-52-9	Intermedi ate	n-3	Azilsarta n Kamedox omil	86303 1-21-4	
44.	Methyl 2-ethoxy-1-((2'-(5- oxo-4,5-dihydro-1,2,4- oxadiazol-3-yl)-[1,1- biphenyl]-4-yl)methyl)-1H- benzo[d]imidazole-7- carboxylic acid	14740 3-52-9	Intermedi ate	n-2	Azilsarta n Kamedox omil	86303 1-21-4	mil /high blood pressure
45.	(5-methyl-2-oxo-1,3- dioxol-4-yl)methyl 2- ethoxy-1-((2'-(5-oxo-4,5- dihydro-1,2,4-oxadiazol-3- yl)-[1,1-biphenyl]-4- yl)methyl)-1H- benzo[d]imidazole-7- carboxylate	86303 1-21-4	Intermedi ate	n-1	Azilsarta n Kamedox omil	86303 1-21-4	
46.	Rosuvastatin Calcium	14709 8-20-2	API	N	-	-	API/ Lowers "bad" cholesterol
47.	N-[5-(bromo methyl)-4-(4- fluoro phenyl)-6-isopropyl pyrimidin-2-yl]-N-methyl methane sulfonamide. TPP salt	79984 2-07-2	Intermedi ate	n-3	Rosuvast atin Calcium	14709 8-20-2	
48.	Tert-butyl2-((4R,6S)-6- ((E)-2-(4-(4-flurophenyl)- 6-isopropyl-2-(N- methylmethyl sulfonamido) pyrimidin-5- yl)vinyl)-2,2-dimethyl-1,3- dioxan-4-yl)acetate	28904 2-12-2	Intermedi ate	n-2	Rosuvast atin Calcium	14709 8-20-2	Rosuvastatin Calcium/ Lowers "bad" cholesterol
49.	monomethylamine salt of rosuvastatin	28771 4-41-4	Intermedi ate	n-1	Rosuvast atin Calcium	14709 8-20-2	

50.	Levosulpiride	23672 -07-3	API	N	-	-	API/symptoms of schizophrenia, anxiety disorders, and dysthymia
51.	2-methoxybenzoic acid	579- 75-9	Intermedi ate	n-4			
52.	2-methoxy-5- sulfamoylbenzoic acid	22117 -85-7	Intermedi ate	n-3	Levosulpi	23672	Levosulpiride /symptoms of schizophrenia,
53.	Methyl 1,2-methoxy-5- sulfamoylbenzolate	33045 -52-2	Intermedi ate	n-2	ride	-07-3	anxiety disorders, and dysthymia
54.	S-1-Ethyl-2-aminomethyl pyrolindine	22795 -99-9	Intermedi ate	n-1			
55.	Telmisartan	14470 1-48-4	API	N	-	-	API/high blood pressure
56.	Methyl 4-butyramido-3- methylbenzoate	30153 3-59-5	Intermedi ate	n-4			
57.	Methyl 4-butyramido-3- methyl-5-nitrobenzoate	15262 8-01-8	Intermedi ate	n-3			
58.	Methyl 7-methyl-2-propyl- 1H-benzo[d]imidazole-5- carboxylate	15262 8-00-7	Intermedi ate	n-2	Telmisart an	14470 1-48-4	Telmisartan/high blood pressure
59.	7-methyl-2-propyl-1H- benzo[d]imidazole-5- carboxylic acid	15262 8-00-7	Intermedi ate	n-1			
60.	Quitiapine Hemifumarate	11197 4-69-7	API	N	-	-	API /schizophrenia, bipolar disorder
61.	2-nitro thio phenol	4875- 10-9	Intermedi ate	n-4			
62.	Phenyl-2-(phenylthio) amine	1134- 94-7	Intermedi ate	n-3	Quitiapin e	11197	QuitiapineHemifumar ate /schizophrenia.
63.	Phenyl-2-(phenylthio)- phenyl carbonate	11197 4-73-3	Intermedi ate	n-2	Hemifum arate	4-69-7	bipolar disorder
64.	Dibenzo[b,f]thiazepin- 1,1(1OH)-one	3159- 07-7	Intermedi ate	n-1			
65.	Carvedilol	72956 -09-3	API	n	-	-	API/treat high blood pressure

66.	1,2,3,4- tetrahydrocarbazol-4-one	15128 -52-6	Intermedi ate	n-3			
67.	4-hydroxy-9-(H) carbazole	52602 -39-8	Intermedi ate	n-2	Carvedilo I	72956 -09-3	Carvedilol/treat high blood pressure
68.	4-oxyranylmethoxy-9-(H)- carbazole	51997 -51-4	Intermedi ate	n-1			
69.	Clopidogrel Bisulphate	12020 2-66-6	API	Ν	-	-	API/treat new/worsening chest pain
70.	2-(thiophen-2-yl)ethanol	5402- 55-1	Intermedi ate	n-4			
71.	2-(Thiophen-2-yl)ethyl 4- methylbenzenesulfonate	40412 -06-4	Intermedi ate	n-3			
72.	(S)-Methyl 2-(2- chlorophenyl)- 2-((2- (thiophen-2- yl)ethyl) amino)acetate hydrochloride	14110 9-19-5	Intermedi ate	n-2	Clopidogr el Bisulphat e	12020 2-66-6	Clopidogrel Bisulphate/ treat new/worsening chest pain
73.	(S)-Methyl 2-(2- chlorophenyl)-2-(6,7- dihydrothieno [3,2- c]pyridin-5(4H)-yl)acetate sulfate	12020 2-71-3	Intermedi ate	n-1			
74.	Pregabalin	14855 3-50-8	API	Ν	-	-	API/ treat neuropathic pain and fibromyalgia.
75.	2-(3-Methyl-butylidene)- melonic acid diethyl ester	86369 -44-0	Intermedi ate	n-4			
76.	2-(1-cyan0-3-methyl- butyl)-malonic acid diethyl ester	18603 8-82-4	Intermedi ate	n-3	Pregabali	14855	Pregabalin/ treat neuropathic pain and
77.	3-aminomethyl 5-methyl hexanoic acid	14855 3-50-8	Intermedi ate	n-2		3-30-6	fibromyalgia.
78.	s(+)Pregabalin mandalate salt	4118- 51-8	Intermedi ate	n-1			
79.	Levocetirizine Dihydrochloride	13001 8-77-8	API	Ν	-	-	API/relieve allergy symptoms

80.	1-Methanesulfonyl-4- methylbenzene,( 2-chloro- ethyl)- chloromethylamine	1671- 18-7	Intermedi ate	n-4			
81.	1-[(4-Chloro-phenyl)- phenyl-methyl]-4- (toluene-4-sulfonyl)- piperazine	16383 7-56-7	Intermedi ate	n-3	Levocetiri zine	13001	Levocetrizine Dihydrochloride/
82.	1-[(4-Chloro-phenyl)- phenyl -methyl]- piperazine	38212 -33-8	Intermedi ate	n-2	hloride	8-77-8	symptoms
83.	1-{4-[(4-Chloro-phenyl)- phenyl -methyl]-piperazin- 1-yl}-ethanol	10980 6-71-5	Intermedi ate	n-1			
84.	Moxifloxacin HCI	18682 6-86-8	API	Ν	-	-	API/ Antibiotic
85.	5H-pyrrolo [3,4-b]pyridine- 5,7(6H)-dione	4664- 00-0	Intermedi ate	n-4			
86.	8-benzyl-7,9-dione-2,8- diazabicyclo[4.3.0]nonane	NA	Intermedi ate	n-3	Moxifloxa	18682	Moxifloxacin HCl/
87.	Cis-8-benzyl-7,9-dione- 2,8- diazabicyclo[4.3.0]nonane	NA	Intermedi ate	n-2	cin HCI	6-86-8	Antibiotic
88.	(4aS,7aS)-Octahydro-1H- pyrrol[3,4-b]pyridine	15121 3-40-0	Intermedi ate	n-1			
89.	Amisulpiride	53583 -79-2	API	N	-	-	API/Antipsychotic
90.	Topiramate	97240 -79-4	API	n	-	-	API/Control seizures (epilepsy).
91.	2, 3,4, 5-Bis-O-(1- MethylEthylidene)-B-D- fructopyranose	20880 -92-6	Intermedi ate	n-1	Topirama te	97240 -79-4	Topiramate /Control seizures (epilepsy).
92.	Levitiracetam	10276 7-28-2	API	n	-	-	API/ Antiepileptic
93.	Azithromycin dihydrate	11777 2-70-0	API	n	-	-	API /Skin infections, ear infections, eye infections

94.	Irbesartan	13840 2-11-6	API	n	-	-	API/Antihypertensive
95.	4'-(2-Butyl-4-oxo-1,3- diazaspiro[4,4]non-1-ene- 3-yl methyl)biphenyl-2- carbonitrile	13840 1-24-8	Intermedi ate	n-2	Irbesarta n	13840 2-11-6	Irbesartan / Antihypertensive
96.	2-n-butyl-4-spiro cyclopenetrate-1-((2'- triphenyl methyl tetrazol- 5-yl) biphenyl-4-yl methyl)-2-imidazole	12475 1-00-4	Intermedi ate	n-1	Irbesarta n	13840 2-11-6	Irbesartan / Antihypertensive
97.	Flurbiprofen	5104- 49-4	API	n	-	-	API/Painkiller
98.	Cloxacillin Sodium	7081- 44-9	API	n	-	-	API/Antibiotic
99.	Terbinafine Hydrochloride	78628 -80-5	API	n	-	-	API/Antifungal
100	Terbinafine	91161 -71-6	Intermedi ate	n-1	Terbinafi ne Hydrochl oride	78628 -80-5	Terbinafine Hydrochloride/ Antifungal
101.	Azithromycin	83905 -01-5	API	n	-	-	API/Antibiotic
102	Roxithromycin	80214 -83-1	API	n	-	-	API/Antibiotic
103	Tramadol Hydrochloride	36282 -47-0	API	n	-	-	API/Painkiller
104	Ornidazole	16773 -42-5	API	n	-	-	API/Antiprotozoal
105	Des Loratadine	10064 3-71-8	API	n	-	-	API/Anti-Allergic
106	Fexofenadine Hydrochloride	15343 9-40-8	API	n	-	-	API /Anti-Allergic
107.	4-(4- (hydroxydiphenylmethyl)pi peridin-1-yl)-1-(4-(2- methyl-3-oxobutan-2- yl)phenyl)butan)-1-one	15343 9-40-8	Intermedi ate	n-1	Fexofena dine Hydrochl oride	15343 9-40-8	Fexofenadine Hydrochloride/ Anti- Allergic

108	. Sertraline Hydrochloride	79559 -97-0	API	n	-	-	API/Antidepressant
109	(4-(3,4-dicholoro-phenyl)- 1,2,3,4-tetrahydro- naphthalen-1-ylidene)- methyl-amine	11980 84-29- 5	Intermedi ate	n-1	Sertraline Hydrochl oride	79559 -97-0	Sertraline Hydrochloride /Antidepressant
110	. Silodosin	16097 0-54-7	API	n	-	-	API/ to treat signs and symptoms of an enlarged prostate gland
111	. Clarithromycin	81103 -11-9	API	n	-	-	API/Antibiotic
112	. Lisinopril	83915 -83-7	API	n	-	-	API/Antihypertensive
113	. Arteether	75887 -54-6	API	n	-	-	API/Antimalerial
114	. Gabapentin	60142 -96-3	API	n	-	-	API/ Antidepressant
115	(1-aminomethyl- cyclohexyl)-acetic acid	60142 -95-2	Intermedi ate	n-1	Gabapen tin	60142 -96-3	Gabapentin / Antidepressant
116	. Hydrochlorothiazide	58-93- 5	API	n	-	-	API /Antihypertensive
117	. Atenolol	29122 -68-7	API	n	-	-	API/Antihypertensive
118	. Domperidone	57808 -66-9	API	n	-	-	API/Antiemetic
119	Amoxicillin Trihydrate	61336 -70-7	API	n	-	-	API/Antibiotic
120	Venlafaxine Hydrochloride	99300 -78-4	API	n	-	-	API/Antidepressant
121	Donepezil Hydrochloride	12001 1-70-3	API	n	-	-	API/Antidepressant
122	. Celecoxib	16959 0-42-5	API	n	-	-	API /pain or inflammation
123	4,4,4-trifluoro-1-(4-methyl phenyl) butano-1,3-diono	720- 94-5	Intermedi ate	n-1	Celecoxi b	16959 0-42-5	Celecoxib/pain or inflammation

124.	Pantoprazole Sodium	13878 6-67-1	API	n	-	-	API/stomach and esophagus problems
125.	(2-(chloromethyl)-3,4- dimethoxypyridine hydrochloride	72830 -09-2	Intermedi ate	n-3			
126.	Panto-I (Sulphide)	139- 66-2	Intermedi ate	n-2	Pantopra zole	13878 6-67-1	Pantoprazole Sodium /stomach and esophagus
127.	Panto-2 (Sulphoxide) (5- (difluoromethoxy)-2- {[3,4- dimethoxypyridin- 2- yl)methyl] thio}-1H2 benzimidazole	10262 5-64-9	Intermedi ate	n-1	Sodium		problems
128.	Gliclazide	21187 -98-4	API	n	-	-	API/ to treat type 2 diabetes
129.	Olmesartan Medoximil	14468 9-63-4	API	n	-	-	API/ Treatment of hypertention
130.	Trityl Olmesartan Medoximil	14690 -92-6	Intermedi ate	n-1	Olmesart an Medoximi I	14468 9-63-4	Olmesartan Medoximil/ Treatment of hypertention
131.	(Methylcobalamin) Vitamin B12	13422 -55-4	API	n	-	-	API/ treat vitamin B12 deficienc y
132.	Bromhexine HCI	611- 75-6	API	n	-	-	API/used in a condition where there is a lot of thick phlegm in the airways
133.	N-(2-nitrobenzyl)-N- Methyl Cyclohexyl amine	80638 -08-0	Intermedi ate	n-2	Bromhexi	611-	Bromhexine HCl/used in a condition where
134.	Bromhexine	3572- 43-8	Intermedi ate	n-1	ne HCI	75-6	there is a lot of thick phlegm in the airways
135.	Bronopol	52-51- 7	API	n	-	-	API/ antimicrobial
136.	Niclosamide	50-65- 7	API	n	-	-	API/to treat broad or fish tapeworm, dwarf tapeworm, and beef tapeworm infections
13	3,5-Dimethyl-4-Nitro 7. Pyridine -N- Oxide (OME Nitro)	14248 -66-9	Intermedi ate	n-3	Niclosami	50-65-	Omeprazole/ to treat and prevent the return of ulcers caused by a certain type of bacteria
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13	8. 4,6-Dichloro pyrimidine	1193- 21-1	Intermedi ate	n-2	ue	7	Erythromycin Oxime/bacteriostatic
13	9. Pyrimidine-4,6 diol	1193- 24-4	Intermedi ate	n-1			antibiotic drug
14	0. Meloxicam	71125 -38-7	API	n	-	-	API/to treat arthritis
14	1. 2-Amino-5-methylthiazole	7305- 71-7	Intermedi ate	n-2	Meloxica	71125	Meloxicam/ to treat
14	2. Methyl 4-hydroxy-2H-1, 2- benzothiazine-3- carboxylate 1,1-dioxide	35511 -14-9	Intermedi ate	n-1	m	-38-7	arthritis

 The project falls under Category B2 of project activity 5(f) as per the schedule of EIA Notification 2006 and amendment dated 27th March, 2020.

• The proposal was considered in the SEAC video conference meeting dated 06.07.2021

During the meeting dated 06.07.2021, the project was appraised based on the information furnished in Form
 – 1, Pre-Feasibility Report, Environment Management Plan and details submitted by e-mail.

- Project proponent (PP) and Technical expert of PP, M/s. Envycraft Environmental Servicesremains present during video conference meeting.
- This is an existing unit and proposed for expansion project for manufacturing of synthetic organic chemicals (API and API intermediates) at GIDC Panoli. Unit is having valid EC and CCA for existing plant. PP presented self certified complianc report for EC and CCA for existing plant. Product profile with its end-use is discussed in depth. Source of water supply is GIDC. Committee noted that PP has addressed there is no legal court case and public complaint against unit.PP presented one Notice of Direction and one Show Cause Notice (SCN)issued by GPCB to unit and its reply submitted at GPCB was presented by PP during meeting.Committee noted that PP has addressed area adequacy with layout plan for proposed project site.Upon asking regarding area adequacy for proposed expansion of production plant, PP said that there is no change in production capacity and only addition of API and its intermediates in existing production plant and at a time, only 3-4 products will be manufactured inexisting plot of 1088 sq. meter.Looking to plot area of 1088 sq. meter for proposed addition of API and its intermediate production and green belt area of 100 sq. meter mentioned in layout plan within premises, Committee asked for addional greenbelt development, technical expert of PP presented 260 sq. meter area allotted by GIDC to unit for greenbelt development

outside premises in GIDC.

- Committee noted the following:
  - ✓ Product profile with specific End-use of each product. At a time, 3-4 products can be manufactured.
  - PP has proposed primary ETP and solvent stripper for total effluent treatment and then will be evaporated in in-house spray dryer.
  - ✓ Fire load calculation mentioning fire water storage, foam type extinguishers, foam trolley extinguishers and fire pumps.
  - ✓ Natural gas is proposed as fuel in boiler, TFH and spray dryer.
  - ✓ Two stage scrubbers will be provided with each proposed process stack.
  - ✓ Scrubbing liquor will be reused within premises or sold as per Hazardous waste Rules.
  - PP submitted hazardous waste matrix mentioning source of generation, quantity and Mode of disposal and committed to comply the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
- Looking to mentioning no waste water generation after proposed expansion, eventhough addition of 130 API and its intermediate as proposed products, Committee asked for clarification regarding it. Technical expert of PP clarified that waste water generation is not increased due to considering worst case scenario of existing product namely calcium stearate after proposed expansion and hence waste water generation from process is not increased. Hence Committee insisted for showing waste water generation quantity from each and every existing as well as proposed products for clarification authenticity proof, technical expert of PP have not submitted this details in presentation and requested for submission after meeting through e-mail. Committee agreed with request and later on technical expert of PP submitted waste water generation quantity from each and every existing as well as proposed products in KL/MT in place of KI/Day through e-mail.

Committee deliberated on Layout plan, Storage details, Process safety, Fire safety, water balance & waste water management, Flue gas and process gas emission & Air Pollution Control System, Hazardous waste matrix, EMP, CER, Green belt, etc. Looking to mentioning only 10% greenbelt within premises in layout plan and two stair cases in production plant area, Committee insisted for revised layout plan and PP later on submitted revised layout plan with mentioning only two stair cases in it.

# After detailed discussion, Committee unanimously decided consider the project in one of upcoming meeting after submission of following documents:

- Proper technical justification regarding no additional waste water generation from process even though addition of 130 API and its intermediate products in existing plant of simply basic chemical and organic salt products. Also submit waste water generation quantity from each and every existing as well as proposed product in KLPD.
- Revised adequate size greenbelt area within premises in place of only 9% of total plot area and revised layout plan along with justification regarding changes made in Green belt area as accorded by SEIAA in existing plant EC order dated 26/02/2019.

- PP submitted their reply for the query raised by SEAC during SEAC meeting dated 06.07.2021 through email.
- The proposal was reconsidered in the SEAC video conference meeting dated **05.08.2021**.
- Revised Salient features of the project including Water, Air and Hazardous waste management are as under:

Sr. no	. Particul	ars						Details		
A-1	Total co	ost of Proposed	Project							
	(Rs. in (	Crores):	1							
		Existir	ng	Propose	ed		Total			
		1.80C	rores	1.09 Cr	ores		2.89 Cr	ores		
	Dreak			_						
	Break-U	p of proposed p	Fristing	<u>.</u>	Dron	0000	d	Total		
	Dela	1115	(Rs In C	rores)	(Rs I	in Ci	ores)	(Rs Ir	n Cro	res)
	Lan	d	0.0	)1	(		-	(	0.0	1
	Buil	ding	0.2	24		0	.26		0.	5
	Plar	t & Machinery	0.4	6		0	.54		1.0	0
	Othe	er	1.0	)9		0	.29		1.3	8
A-2	Details	of Environmen	tal Manag	ement P	lan (E	(MP		As below	N:	
	1	-		1						
Sr. No	Unit	Installed C (KLD	apacity ))	Cap Cost in La	ital (Rs. ics )	Oj g (La	oeratin   Cost acs/Mo nth)	Mainten ce Cos (Lacs/M th)	ian st Ion	Total Recurring Cost (Lacs/Mo nth)
		ETF	)	9.1	1		1.58	0.17		1.75
1	Water	Stripp	er	10.	0		2.36	0.24		2.60
		Spray D	ryer	35.	8		5.0	2.3		7.3
2	APCM	6 Nos. Sc	rubber	28	3		0.7	0.35		1.05
	LDAR	IVIC Momborship 9	Dianaaal							
3	Waste		ation	1.0	C		2.6	-		2.6
5	(Expense)	Transpor	tation	-			04	-		0.4
	AWH						0.1			0.1
4	Monitoring Cost	In House Me	onitoring	1.5	0		0.10	-		0.10
		Fire Hydrant Syste	& pipeline m	14.	5		0.12	0.06		0.18
		Safety equipm	nent/PPES	6.0	C		0.06	0.03		0.09
5	Fire & Safety	Fire Exting Foam Tr	uisher & olley	2.	5		0.02	0.01		0.03
		Integrated	DCS	20.	00		1.00	0.02		1.02
		Flameproof Fittin	Electric g	5.0	C		0.25	0.05		0.30
6	Greenbelt	Tree	S	0.4	4		0.04	0.02		0.06
7	Occupation al Health	OHC, Trai Medical Ch	ning & ieck-up	2.0	0		0.10	0.20		0.30
8	CER	1% of propos	ed project	1.5	0		0.01	0.002	2	0.012
	Total			137 ~13	.6 B.0					17.79

Summa	ry					
	Cost of Project in Crores per Lakr	IS:	289.0 La	akn		
	EMP Capital Cost in Lakhs:		138.00 L	_akn		
A 0	EMP Recurring Cost in Lakns/An		213.481			
A-3	allocation to be at least 1.5 times the slabs Environmental Clearance as per the mecha	given in the OM d nism published vide	ated 01.05 MoEF&C	e of projec 5.2018 for S C's OM vide	t falls un PA and 2 e 31.10.20	der CPA/SPA, CER fi times for CPA in case 19.)
		% as per the	e OM	Rs.	in Lakh	1
	Existing as per EC:	1%		1.50	Lakh	
	Proposed	1%		1.50	Lakh	
	Additional:					
As Per	EC:		[	Та		daot
	Activities				Rai Duc Rein I	akh
	ducational Activition / Skill Dovelopr	mont			<u>(3. III L</u> 0.75	anii
	Andian & Hanth Facilities	nem			0.75	
•			A		0.75	
	I OTAL COST		Appr	OX. INR	1	1.50 Lakn
Dropos	od (Additional):					
nopos				Dha	se Wie	e Budget
	Activities			1 st	2 nd	
	(On basis of Needs Assessn	nent)		Year	Yea	r TOTAL
	Nos (1 lakh) &Solar Street light (12 16000) in <b>Village- Bakrol</b>	Watt) (3 Nos.	(3 Nos. X			1.50
	lotal Cost		A	pprox.II	NK	1.50 Lakn
В	Land / Plot ownership details:	:				
	Land Possession letter No.	: GIDC/RM-A/	ALT/PL	/SHD/38	49 Date	ed:21/12/2017
B-1	Plot ar <u>ea</u>					
		Existing	9	Propos	sed	Total
	Total Area:	1088.0 Sq	. m.	Nil		1088.0 Sq. m.
B-2	Brief note on Area adequacy in	line to propos	sed proje	ect activi	ties:	
	Total Production: (Existing)	ng:75 MT/Mon	th)			
	<ul> <li>Company will store its ra</li> </ul>	w material in	, Γanke Λ		ure Raw	v Materials from
	the local market 00% of	these row mo	toriale e			hla from this
				oriolo uil	, avaiidi II bo oto	
		ss quantity of f				neu).
	LIST OF HAZARDOUS CREMI	cais stored in	ianks sh	IOWN DEI	ow.	
	S.N Name of chemical	Quantit (Nos.)	t <b>y</b>	Total (Nos.)	Т	otal Qty. to be store (KL)
		Non-PESO	3 Tank		<b>I</b>	
	1 Hydrochloric Acid	5 KL		1 Nos.		5 KL
	2 Nitric Acid	5 KL		1 Nos.		5 KL
	3 Caustic sol. (NaOH So	l.) 5 KL	Ī	1 Nos.		5 KL
	Area required for ETP 35	5.0 m² & for Sp	oray Dry	ver 66 m	2.	
	25 m ² areas provided for	r the Boiler,				
			ana ara	2		

	>	80 m ² area	as (G+2) provid	ed for Ha	zardo	ous wa	ste St	torage area.		
		194.4 m ² a	areas (G+2) will	be provid	ded f	or the r	manuf	acturing of t	he proposed	
	<b>C</b>	products.							Τ	
	Sr N o	Part	iculars	Criteria Storaç	for ge	Inver Requ (MT)	ntory Jired (KL)	Area Required m2	Area Proposed m2	
	1	Finished p storage are (1-week in	roduct ea ventory)	0.5 M ⁻ 1m ²	T/	2	0	40	65.6	
	2	Raw Mater (1 week in (G+2)	rial Store area ventory)	0.5 M ⁻ 1m ²	Τ/	8	0	160	183.6	
	3	Drum Stor (Storage a	age Area t a time)	100 Dru (0.5 M 1m ² )	um T/	2	0	50	65.6	
	4	Non-PESC Area (Storage a	) Storage t a time)	Tanks 5 KL x	s 3	15	.0	30.0	40.0	
	5	Cylinder S (Nitrogen, Chlorine, H Gas) (Storage a	torage Area Hydrogen, ICI & NH3 at a time)	-		0.5	65	18.0	25.0	
	6 Stora (90 D		s Waste rea(G+2) ventory)	-		250.0		120.0	240.0	
		ר	otal			385 M	.56 T	418 m2	599.8 m2	
<u> </u>	>	Hence, ac its interm	lequate area is ediate mfg. Fa	s availab cility.	le fo	r prop	osed	expansion	in Bulk drug	
B-3	Greer	h belt area	Evictin			Dronoo	od	-	[otol	
			EXISUI	ig	(5	Sa me	eu ter)	(Sa	meter)	
	Area	in Sq. er	100 In plant Pre	emises)		- (Sq. meter)		(In plant P	360 27emises: 1008	
			+ 260	, ,				In GIDC	; Area: 260)	
	0/ 04	total area	(IN GIDC	area)					220/	
	// 01		33%	)		-			JJ /0	
С	Emple	oyment aer	eration							
			Existing	F	Propo	osed		Total		
		Γ	25					25		
			(Direct: 10	)			(D	irect: 10		
			indirect: 18	D)			Ind	irect: 15)		
D		ED.								
D-1	Source	e of Water	Supply							
		Bore well, Surface	e water, Tanker supp bly Authority	ply etc)						
	Status	s of permissi	on from the co	ncern aut	hority	/.				
	Obtair	ned (Vide I e	tter No · NAO/	DNIK/2270	) Da	tod·31	03/20	)21)		
	Obtail					100.01/	00,20	<u>,                                    </u>		

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			Existin KLD	g	Prop osed	Af	ter E	∃xpans KLD	ion		
Catego	ory	Total	Rec ycle /Reu se	Fresh	(Addi tional ) KLD	Tota	al	Recy cle	Fre sh	9 1	Remarks
(M) Dom tio	nes c	3.0	-	3.0	-	3.0	)	-	3.0	)	
(N) Garo	den g	1.0	-	1.0	-	1.0	)	-	1.0	)	
(O) Indu	Istria	l									Source: GID
Proces	SS	7.50	-	7.50	-	7.5	0	-	7.5	0 A ()	<b>WC</b> :Calcium Acetate & Calcium Stearate
Washi	ng	1.5	-	1.5	-	1.5	5	-	1.5	5	
Boile	r	4.0	2.5	1.5	-	4		2.5	1.5	5	Req.:4 KLD Boiler Condensate Recovery: 2. KLD Hence, Fres water: 1.5 KLD
Coolin	ıg	1.0	-	1.0	-	1.0	)	-	1.0	)	
Other (Scrubb )	s ing	1.5	-	1.5	3.3	4.8	3	0.3	4.5	5	Cooling blov down =0.3 KLD reuse after neutralizatior
Industr Tota	rial I	15.5	2.5	13	3.3	18.	8	2.8	16	;	
Grane Total (A+B+	d I C)	19.5	2.5	17	3.3	22.8	8	2.8	20	)	
Brief Not > To W > W S. N	te or otal f hich /orst Prc	i worst fresh Wa Water C Case S oduct Na	case s ater Re Consum cenaric ame	cenario f equiremen option for o; Water f pr	for water at of the Process r req. (in or 1 MT oduction	r cons propos will be KL) n	sed sed 7.5 Pro (M	ption: project 0 KLD Total oductic T/Mont	will I on h)	be 2	0.0 KLD, out al water req (KLD)
	<u> </u>	<u> </u>		<u> </u>	Existin	g					
1	Calc	cium Ace	etate		1.20			50			2.00
<u> </u>		aum Ste	arate	 Total	0.53			25			5.5U 7.50
Note:Afte	er Ex	pansion	Worse	case of	Water Re	eq. wil	l be	remain	Unc	han	7.50 ged.
Sum	mar	v of wat	ter	Fxistin	a Pr	opose	ed	Tota	al aft	ter	
re	equi	rement		KLD	s (Ad	dition KLD	nal)	Exp	ansı (LD	on	Remarks

	for the project (A)						vvalei
	Quantity to be recycle	<b>d</b> 2.5		0.3	2.8		Supply
	Total fresh water	17.0		2.00	20.0	0	Authonity
	requirement (C)	17.00		0.00	20.0	0	
	i.e. $A = B + C$	quirement =	Fresh wat	er + Red	cycled wat	er	
	Reuse/Recycle details	(KLD) with	feasibility. al				
	Source of waste water for reuse in KLD (From where it is coming)	Irce of waste ter for reuse (LD (From where it is coming) Application area with quantity in KLD (Where it is used) Cha of v to (COD				Remarks regarding feasibility to reuse	
	2.5 KLD from Boiler (Condensate recovery)	2.5 KLD rec Boile	cycled in r	pH: BOI CO	7.5-8.0 D <bdl D<bdl< td=""><td></td><td>Voo it io</td></bdl<></bdl 		Voo it io
	Boiler Blow down: 0.2 KLD + Cooling Blow down : 0.1 KLD	Scrubbing:	0.3 KLD	pH – 6 TSS < TDS < BOD < COD<	-8 65 mg/l 400 mg/l 15 mg/l 45 mg/l	F	Feasible.
	<ul> <li>In case of no reuse/records</li> <li>no reuse/recycle.</li> <li>In Boiler 2.5 KLD c reduced to 1.5 KLD.</li> <li>Wastewater 0.3 K Equalization cum Network</li> </ul>	cycle of was ondensate re LD (0.2 KL eutralization	ecovery con D from Bo Tank & the	bive brie nsidered biler &0.	f note on j in the recy 1 KLD fro	ycle, h om co	cation as wh nence make poling) will
D-3	In case of no reuse/rec no reuse/recycle. In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Ne Waste water generation	cycle of was ondensate re LD (0.2 KL eutralization on (KLD)	ecovery con D from Bo Tank & the	bive brie nsidered biler &0. <u>n reused</u>	f note on j in the recy 1 KLD fro for Scrubb	ycle, h om co ing.	cation as wh
D-3	In case of no reuse/rec no reuse/recycle.  In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Ne Waste water generation	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD	ecovery con D from Bo Tank & the Propose (Addition KLD	bive brie nsidered biler &0. n reused ed To hal) Ex	in the recy 1 KLD fro for Scrubb otal after cpansion KLD	ycle, h om co ing.	cation as whence make to booling) will b Remarks
D-3	In case of no reuse/rec no reuse/recycle.  In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Net Waste water generation Category (I) Domestic	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD 2.5	ecovery con D from Bo Tank & then Propose (Addition KLD	biler &0. nsidered biler &0. n reused ed To hal) Ex	in the recy 1 KLD from for Scrubb otal after cpansion KLD 2.5	ycle, h om co ing.	cation as whence make pooling) will be treated into ETP.
D-3	In case of no reuse/rec no reuse/recycle.  In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Ne Waste water generation Category (I) Domestic (J) Industrial	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD 2.5	ecovery con D from Bo Tank & then Propose (Addition KLD	biler &0. n reused ed To hal) Ex	f note on j in the recy 1 KLD fro for Scrubb otal after cpansion KLD 2.5	vcle, h om co ing. Wi	cation as whence make a boling) will be marks and be treated into ETP.
D-3	In case of no reuse/rec no reuse/recycle. In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Ne Waste water generation (I) Domestic (J) Industrial Process	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD 2.5 7.10	ecovery con D from Bo Tank & then Propose (Addition KLD -	biler &0. n reused ed To hal) Ex	f note on j in the recy 1 KLD fro for Scrubb otal after cpansion KLD 2.5 7.10	vcle, h om co ing. Wi	cation as whence make to boling) will be Remarks ill be treated into ETP. VC: Calcium Stearate
D-3	In case of no reuse/rec no reuse/recycle. In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Ne Waste water generation Category (I) Domestic (J) Industrial Process Washing	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD 2.5 7.10 1.5	ecovery con D from Bo Tank & then Propose (Addition KLD -	biler &0. hreused hal) Ex	f note on j in the recy 1 KLD fro for Scrubb otal after cpansion KLD 2.5 7.10 1.5	vcle, h om co ing. Wi	cation as whence make to boling) will be Remarks ill be treated into ETP. VC: Calcium Stearate
D-3	In case of no reuse/rec no reuse/recycle. In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Ne Waste water generation Category (I) Domestic (J) Industrial Process Washing Boiler	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD 2.5 7.10 1.5 0.2	te water, C ecovery con D from Bo Tank & then Propose (Addition KLD - -	biler &0. n reused ed To hal) Ex	f note on j in the recy 1 KLD fro for Scrubb otal after cpansion KLD 2.5 7.10 1.5 0.2	vcle, h om co ing. Wi	cation as when hence make to boling) will be remarks ill be treated into ETP. C: Calcium Stearate Reuse in rubbing offer
D-3	In case of no reuse/rec no reuse/recycle. In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Ne Waste water generation (I) Domestic (J) Industrial Process Washing Boiler Cooling	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD 2.5 7.10 1.5 0.2 0.1	ecovery con D from Bo Tank & then Propose (Addition KLD - - - - -	biler &0. n reused ed To hal) Ex	in the recy in the recy 1 KLD from for Scrubb otal after (pansion KLD 2.5 7.10 1.5 0.2 0.1	vcle, h om co ing. Wi Wi	cation as whether the sector make the sector m
D-3	In case of no reuse/rec no reuse/recycle. In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Ne Waste water generation Waste water generation (I) Domestic (J) Industrial Process Washing Boiler Cooling Scrubbing Solution (25-30% NaCl/NaOCl)	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD 2.5 7.10 1.5 0.2 0.1 1.5	te water, C ecovery con D from Bo Tank & then Propose (Addition KLD - - - - - - -	biler &0. n reused al) Ex al) Ex	in the recy 1 KLD from 1 KLD from 1 KLD from 1 KLD 2.5 7.10 1.5 0.2 0.1 1.5	vcle, h om co ing. Wi Wi Sci ne	cation as whence make to boling) will be Remarks ill be treated into ETP. /C: Calcium Stearate Reuse in rubbing after putralization. be treated in
D-3	In case of no reuse/rec no reuse/recycle. In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Ne Waste water generation (I) Domestic (J) Industrial Process Washing Boiler Cooling Scrubbing Solution (25-30% NaCl/NaOCl) Scrubbing Solution (10-15% NaNO ₂ )	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD 2.5 7.10 1.5 0.2 0.1 1.5	ecovery con D from Bo Tank & then Propose (Addition KLD - - - - - - - - - - - - -	biler &0. n reused ed To hal) E	in the recy in the recy 1 KLD fro for Scrubb otal after cpansion KLD 2.5 7.10 1.5 0.2 0.1 1.5 0.5	vcle, h om co ing. Wi Wi	cation as whether the sector make the sector m
D-3	In case of no reuse/rec no reuse/recycle. In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Net Waste water generation Waste water generation (I) Domestic (J) Industrial Process Washing Boiler Cooling Scrubbing Solution (25-30% NaCl/NaOCl) Scrubbing Solution (10-15% NaNO ₂ ) Scrubbing Solution (25-30% NaBr/HBr)	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD 2.5 7.10 1.5 0.2 0.1 1.5 -	Propose (Addition KLD - - - - - - - - - - - - - - - - - - -	biler &0. n reused ed Te hal) Ex	in the recy 1 KLD from 1 KLD from 1 KLD from 1 KLD 2.5 7.10 1.5 0.2 0.1 1.5 0.5 1.0	Vill Vill Vill	cation as whether the second make the second m
D-3	In case of no reuse/rec no reuse/recycle. In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Net Waste water generation Waste water generation (I) Domestic (J) Industrial Process Washing Boiler Cooling Scrubbing Solution (25-30% NaCl/NaOCl) Scrubbing Solution (10-15% NaNO ₂ ) Scrubbing Solution (25-30% NaBr/HBr) Scrubbing Solution (25-30% NaBr/HBr) Scrubbing Solution (18-20% Na ₂ SO ₂ )	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD 2.5 7.10 1.5 0.2 0.1 1.5 - - -	Propose (Addition KLD - - - - 0.5 1.0 1.0	biler &0. n reused al) E	in the recy 1 KLD from 1 KLD from 1 KLD from 1 KLD 2.5 7.10 1.5 0.2 0.1 1.5 0.5 1.0 1.0	Ville, h om co ing. Wi Wi Wi Wi Vill To E	cation as whether the sector make the sector m
D-3	In case of no reuse/rec no reuse/recycle. In Boiler 2.5 KLD c reduced to 1.5 KLD. Wastewater 0.3 K Equalization cum Net Waste water generation Waste water generation (I) Domestic (J) Industrial Process Washing Boiler Cooling Scrubbing Solution (25-30% NaCl/NaOCl) Scrubbing Solution (10-15% NaNO ₂ ) Scrubbing Solution (25-30% NaBr/HBr) Scrubbing Solution (25-30% NaBr/HBr) Scrubbing Solution (18-20% Na ₂ SO ₃ ) Scrubbing Solution (30% Lig. Ammonia)	cycle of was ondensate re LD (0.2 KL eutralization on (KLD) Existing KLD 2.5 7.10 1.5 0.2 0.1 1.5 0.2 0.1 1.5	Ate water, Constraints water, Co	Sive brie nsidered biler &0. n reused ed Te hal) Ex	in the recy 1 KLD from 1 KLD from 1 KLD from 1 KLD from 1 Second 2.5 7.10 1.5 0.2 0.1 1.5 0.2 0.1 1.5 0.5 1.0 1.0 0.8	vcle, h om co ing. Wi Wi Wi Vill To E Reus prem	cation as whether the second s

			was	te water						
-		Total (A	<u>A+B)</u>		12.9	3.3		16.2		
Br	ief Not	te on wors	t case :	scenario	for wast	te water gener	ratior	n(Qualitati	ve a	and Quantitative):
	⊳ т.	otal Maata V	Motor (	Concretic	n of the r	proposed prois		bo 16 0 K		out of which Mast
	۲ ۲ ۲ ۱۸/	uai waste later Gener	vvaler ( ration fo	Jeneratio	will he 7	סוטיטטטפט proje ד 10 גו ח	CL WIII	IDE 10.2 K	LD,	out of which was
Γ	V			Waste V	Nater					
	с v	<b>D</b>	-1	Gen. (ii	n KL)	Total	Tot	al Waste		
	5.N	Produc	CT	for 1	MT	Production (MT/Month)	wa	ter Gen.	Cr	aracteristics
L				produc	ction		(			
					,	Existing				
									p⊢	– 6.5-7.5
		Calciur	m	7.0	•	05		0.74	TS	S - 210 mg/l
	1	Stearat	te	7.0	8	25	6	.8~7.1		15 - 17000  mg/I
										)D -2786 ma/l
┢							<b>_</b>			22 2100 mg/l
			Hen	ice Worst	Case C	onsidered is	7.1	KLD		
Br	ief jus	stification	in cas	se of no	proces	ss effluent g	genera	ation or	no	industrial efflue
qe	neratio	on or no h	nigh co	ncentrati	on efflu	ent generatio	n fro	m propos	ed	project (Whichev
s. is	applic	able).	<u>g</u> ee		••	en generane		p. op oo	•••	
	> No	ot Applicab	le.							
	> Tł	here will be	effluen	it generati	on. The	detail has beei	n furn	ished in w	ater	Balance.
D-	4	Mode of I	Dispose	al & Final	meetina	point (Existing an	nd Pron	osed)		
Fvi	sting and	Proposed				( <b>_</b>		· · /		
	Fxis	tina								
	Dom	estic: D	omestic	: wastewa	ter dispo	sal by Septic	Tank	&Soak Pit		
	Indu	strial: In	dustria	l Wastewa	ater@ 10	) 4 KI D will be	treat	ted into In-	hoi	ise Sprav Drver
			) achiev	e Zero I i		scharge			100	
	Tota	I Proposed	d			yo.				
	Dom	estic: D	omestic	c wastewa	ater2.5 K	LD will be treat	ted in	to ETP.		
	Indu	strial: In	dustria	I Wastewa	ater@ 13	3.0 KLD will be	e trea	ted into In	·hοι	ise Spray Drver
		to	achiev	e Zero Li	quid Dis	scharge.				
<b>D-</b> :	5	Treatmen	nt faciliti	ies						
	r Dom	estic wast		r:						
F۸		JULIU WAJL								
Fo Ca	Dacinv	of STP N	of Annli	cable						
Fo Ca Fo	r Indu	of STP: No	ot Appli	cable r: Treatme	ent facilit	v within premis	ses wi	ith canacit	v	
Fo Ca Fo [In-l	or Indus house ET	of STP: No strial wast	ot Appli e water condary, 7	cable r: Treatme ^{rertiary), MEE}	ent facilit	y within premis Spray Dryer, STP et	ses wi	ith <b>capaci</b> t	y	
Fo Ca Fo [In-I Trea	house ET atment sc	of STP: No strial wast P (Primary, Sec cheme including	ot Appli e water condary, 7 g segregat	cable r: Treatme rertiary), MEE tion at source	ent facilit 5, Stripper, S . (Give Cha	y within premis Spray Dryer, STP et aracteristics of each	SES Wi ic. ch strea	ith <b>capaci</b> im i.e. COD, B	з <b>у</b> юр, 1	TDS etc.) In case of
Fo Ca Fo [In-I Treastre	house ET atment sc atm segr	of STP: No strial waste P (Primary, Sec cheme including regation, Separ	ot Appli condary, 7 g segregat rate ETP (	cable r: Treatme rertiary), MEE tion at source (ETP-1, ETP-	ent facilit 5, Stripper, S . (Give Cha 2) for ea	y within premis Spray Dryer, STP et aracteristics of eac ch stream shall be	SES Wi tc. th streated proposition	ith <b>capacií</b> Im i.e. COD, B sed.	<b>y</b> od, 1	TDS etc.) In case of
Fo Ca Fo [In-l Tre: stre	house ET atment sc atm segr	of STP: No strial wast P (Primary, Sec cheme including regation, Separ ydraulic Lo	ot Appli e water condary, 1 g segregat rate ETP ( oad:	cable r: Treatme Fertiary), MEE tion at source (ETP-1, ETP-	ent facilit 5, Stripper, S . (Give Cha 2) for ea	y within premis Spray Dryer, STP et aracteristics of eac Ich stream shall be	SES Wi ic. ch strea propos	ith <b>capacil</b> Im i.e. COD, E sed.	∑ <b>y</b> od, `	TDS etc.) In case of
Fo Ca Fo [In-I Trea strea	tor Indus house ET atment sc am segr → Hy ✓ In	of STP: No strial wast P (Primary, Sec cheme including egation, Separ ydraulic Lo -house Stri	ot Appli e water condary, 1 g segregat rate ETP ( oad: pper: 1)	cable r: Treatme Fertiary), MEE tion at source (ETP-1, ETP- 2.9 KLD	ent facilit , Stripper, S . (Give Cha 2) for ea	y within premis Spray Dryer, STP et aracteristics of eac Ich stream shall be	SES Wi ic. ch strea propos	ith <b>capacil</b> ım i.e. COD, E sed.	ÿ 0D, [∩]	TDS etc.) In case of
Fo Fo [In-I Tre: stre	principal principal house ET atment sc principal atment sc	of STP: No strial wast P (Primary, Sec cheme including regation, Separ ydraulic Lo -house Stri -House ET	ot Appli e water condary, 1 g segregat rate ETP ( oad: pper: 1) P (Prim	cable r: Treatme Fertiary), MEE tion at source (ETP-1, ETP- 2.9 KLD hary): 13.1	Ent facilit E, Stripper, S . (Give Cha 2) for ea KLD	y within premis Spray Dryer, STP et aracteristics of eac ch stream shall be	SES Wi ic. ch strea propos	ith <b>capacil</b> ım i.e. COD, E sed.	<b>y</b> od, 1	TDS etc.) In case of
Fo Ca Fo [In-I Tre stre	tor Induse house ET atment sc eam segr ✓ In ✓ In ✓ In ✓ In	of STP: No strial wast P (Primary, Sec cheme including regation, Separ ydraulic Lo -house Stri -House ET -House Spi	e water ot Appli e water condary, 1 g segregat rate ETP ( oad: ipper: 1: P (Prim ray Dry	cable r: Treatme Fertiary), MEE tion at source (ETP-1, ETP- 2.9 KLD ary): 13.1 er: 13 KLI	ent facilit E, Stripper, S . (Give Cha 2) for ea KLD	y within premis Spray Dryer, STP et aracteristics of eac ch stream shall be	SES Wi c. ch strea propos	ith <b>capacit</b> Im i.e. COD, E sed.	Э <b>У</b> ОД, Т	TDS etc.) In case of
Fo Ca Fo [In-I Tre: stre	house ET atment sc atment sc am segr ✓ In ✓ In ✓ In	of STP: No strial wast P (Primary, Sec cheme including egation, Separ ydraulic Lo -house Stri -House ET -House Spi	ie water ot Appli e water condary, 1 g segregat rate ETP ( oad: ipper: 1 P (Prim ray Dry	cable r: Treatme Fertiary), MEE tion at source (ETP-1, ETP- 2.9 KLD (ary): 13.1 er: 13 KLI	ent facilit ^{E,} Stripper, S . (Give Cha 2) for ea KLD D	y within premis Spray Dryer, STP et aracteristics of eac och stream shall be	SES Wi cc. ch strea propos	ith <b>capacil</b> Im i.e. COD, E sed.	з <b>у</b> юD, ⁻	TDS etc.) In case of
Fo Ca Fo [In-I Tre stre	prindus house ET atment sc eam segr → Hy ✓ In ✓ In ✓ In	of STP: No strial wast P (Primary, Sec cheme including regation, Separ ydraulic Lo -house Stri -House ET -House Spi -House Spi	ie water ot Appli e water condary, 1 g segregat rate ETP oad: ipper: 1. P (Prim ray Dry	cable r: Treatme Fertiary), MEE tion at source (ETP-1, ETP- 2.9 KLD ary): 13.1 er: 13 KLI	ent facilit 5, Stripper, S . (Give Cha 2) for ea KLD D	y within premis Spray Dryer, STP et aracteristics of eac ich stream shall be	SES Wi c. ch strea propos	ith <b>capacil</b> ım i.e. COD, E sed.	Э ОД, ^т	TDS etc.) In case of
Fo Ca Fo [In-I Tre: stre	prindus house ET atment sc earm segr → Hy ✓ In ✓ In ✓ In ✓ In	of STP: No strial wast P (Primary, Sec cheme including regation, Separ ydraulic Lo -house Stri -House Spi -House Spi apacity:	ot Appli e water condary, 1 g segregat rate ETP ( oad: ipper: 1: P (Prim ray Dry	cable r: Treatme Fertiary), MEE tion at source (ETP-1, ETP- 2.9 KLD ary): 13.1 er: 13 KLI 5 0KLD	ent facilit 5, Stripper, S . (Give Cha 2) for ea KLD	y within premis Spray Dryer, STP et aracteristics of eac ch stream shall be	SES Wi cc. h strea propos	ith <b>capacil</b> ım i.e. COD, E sed.	с <b>у</b> Ю.	TDS etc.) In case of
Fo Ca Fo [In-I Tre: stre	prindus house ET atment sc earm segr → Hy ✓ In ✓ In ✓ In ✓ In ✓ In	of STP: No strial wast P (Primary, Sec cheme including regation, Separ ydraulic Lo -house Stri -House Spi apacity: -house Stri -House Stri -House Stri	ipper: 1 popper: 1	cable r: Treatme Fertiary), MEE tion at source (ETP-1, ETP- 2.9 KLD ary): 13.1 er: 13 KLI 5.0KLD pary): 15.0	ent facilit E, Stripper, S . (Give Cha 2) for ea KLD D	y within premis Spray Dryer, STP et aracteristics of eac ach stream shall be	SES Wi c. ch strea propos	ith <b>capacil</b> Im i.e. COD, E sed.	<b>'y</b> OD, [∙]	TDS etc.) In case of
Fo Ca Fo [In-I Tre. stre	prindus house ET atment sc am segr → Hy ✓ In ✓ In ✓ In ✓ In ✓ In ✓ In ✓ In	of STP: No strial wast P (Primary, Sec cheme including egation, Separ ydraulic Lo -house Stri -House Stri -House Stri -house Stri -house Stri -House Stri -House Stri -House Stri	pper: 1: P (Prim ray Dry	cable r: Treatme Fertiary), MEE tion at source (ETP-1, ETP- 2.9 KLD (ary): 13.1 er: 13 KLI 5.0KLD hary): 15.0 er: 15 KL	ent facilit E, Stripper, S (Give Cha 2) for ea KLD D	y within premis Spray Dryer, STP et aracteristics of eac ich stream shall be	SES Wi c. ch strea propos	ith <b>capacil</b> Im i.e. COD, E sed.	у ОД, ⁻	TDS etc.) In case of
Fo Ca Fo [In-I Tre: stre	prindus house ET atment sc earm segr → Hy ✓ In ✓ In ✓ In ✓ In ✓ In ✓ In ✓ In ✓ In ✓ In	of STP: No strial wast P (Primary, Sec cheme including regation, Separ ydraulic Lo -house Stri -House Stri -House Stri -house Stri -House Stri -House Stri -House Stri -House Stri -House Stri	ipper: 1: P (Prim ray Dryd polyddia P (Prim ray Dryd polyddia P (Prim ray Dryd	cable r: Treatme Fertiary), MEE tion at source (ETP-1, ETP- 2.9 KLD ary): 13.1 er: 13 KLI 5.0KLD bary): 15.0 er: 15 KLI g segrega	ent facilit E, Stripper, S (Give Cha 2) for ea KLD O KLD O KLD O S (Solution at solution)	y within premis Spray Dryer, STP et aracteristics of eac ch stream shall be	Ses Wi c. h strea propos	ith capacit im i.e. COD, B sed.	y od, f	TDS etc.) In case of
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(	collected in Equalizat	ion cum Neu	utralization Tank 8	then reused fo	or Scrubbing.
Sr.	Paramotor	Unit	Utilities Char	racteristics	Combine Effluent
No.	Falametei	Onit	Boiler	Cooling	after neutralization
	Quantity (KLD)		0.2	0.1	0.3
1	рН	pH Unit	7.5-8	7.5-8	6.0-8.0
2	TSS	mg/L	56	87	<65
3	TDS	mg/L	500	100	<400
4	BOD	mg/L	10	16	<15
5	COD	mg/L	30	50	<40
6	Ammo. Nitrogen	mg/L	Nil	Nil	Nil

#### Stream 2:

Waste water from process @ 7.1KLD will be combining with 1.5 KLD from washing& 1.5 KLD 25-30% of NaCl/NaOCl Sol. &0.5 KLD 10-15% NaNO₂ Scrubbing Soln.& Domestic Wastewater 2.5 KLD.

> Combine wastewater@13.1 KLD Subjected to Primary ETP.

S r. N	Parame ter	Unit	Worst Case (Quantity) from Process	Domes tic Waste	Stream fro Characteris Stre	om utilities stics Dilute eam	Combi ne Effluen	After Primary treatmen
0			Calcium Stearate	water	Washing	Scrubber	t	t
	Quantity (I	KLD)	7.1	2.5	1.5	2.0	13.1	13.1
1	pН	pH Unit	6.5-7.5	6.0-8.0	6-8	7-8	6.5-7.5	6.5-7.5
2	TSS	mg/L	210	200	150	70	180	54
3	TDS	mg/L	17000	800	2500	500	9580	10059
4	BOD	mg/L	500	250	800	190	385	308
5	COD	mg/L	2786	10	2500	524	1843	1475
6	Ammo. Nitrogen	mg/L	NIL	NIL	NIL	NIL	NIL	Nil

#### Stream 3:

- Primary ETP treated Effluent @ 13.1 KLD allowed to in-house Solvent Stripper, where VOC will be stripped off.
- Treated effluent from stripper (12.9 KLD) will be allowed to in-house Spray Dryer to achieve Zero liquid Discharge (ZLD).

Sr. No.	Para	Unit	After Primary treatment	After Solvent Stripper
	Quantity (KLD)		13.1	12.9
1	6.5-7.5	pH Unit	6.5-7.5	6.5-7.5
2	180	mg/L	54	54
3	9580	mg/L	10059	10059
4	385	mg/L	308	123
5	1843	mg/L	1475	590
6	NIL	mg/L	Nil	Nil

# Stream 4:

- Scrubbing Solution 25-30% NaCl/NaOCI @ 1.5 KLD& 10-15% NaNO₂ @ 0.5 KLDwill be subjected to in house ETP, Stripper & Spray Dryer.
- Scrubbing Solution 25-30%NaBr/HBr@ 1.0KLD& 18-20% Na₂SO₃ @ 1.0 KLD will be sell to end user.
- Scrubbing Solution 25-30% Liq. Ammonia@ 0.8 KLD will be reused within premises.

Note: (In case of CETP discharge) :





.3	Process ga	<b>S</b> i.e. Type of pol	llutant gases	(SO _{2,} HCI, NH _{3,}	Cl _{2,} NO _x e	tc.)					
kis	sting:		T								
s n	Sr. Specific Sou (Name of Pr	urce of em the Produc ocess)	ission ct &	Stack/Vo Heigh (meter	ent t ')	T er	ype of nission	Coi	Air Pollution htrol Measures (APCM)		
	1 React	ion Vessel		11		Cl ₂ < 7 HCl<	7.2 mg/NM 16 mg/NM	³ Tv	Two Stage Alkali Scrubber		
ota	al Proposed:										
; r	Sr. Specifi Sr. en no. (Name of Pr	Specific Source o emission (Name of the Produc Process)			of ns i.e. tants CI, CI )	Sta H Dia	ick/Vent eight / i (meter)	Air Po	Ilution Control Measures (APCM)		
	1 Proce 1 <b>(Chl</b> Benz	Process Vent – 1 (Chlorination) Benzyl Chloride			9 n3 20 n3	1	8 / 0.2	Two	o Stage Alkali Scrubber		
	2 (2-(chlor dimeth hydr	Process Vent – 2 (Sulphonation) (2-(chloromethyl)-3, dimethoxypyridine			Process Vent – 2 (Sulphonation) (2-(chloromethyl)-3,4- dimethoxypyridine hydrochloride		Two	Two Stage Alkali Scrubber			
	3 (Bro B	ess Vent – 3 omination) Bronopol ess Vent – 4 trification) elmisartan		HBr< mg/Nr	30 n3	1	8 / 0.2	Two	o Stage Alkali Scrubber		
	4 Proce 4 <b>(Nitr</b> Tel			ss Vent – 4 ification) misartan		NO2< mg/Nr	25 n3	1	8 / 0.2	Two	o Stage Alkali Scrubber
	5 (Am Clari	ss Vent – 5 <b>mination)</b> thromycin		NH3< ⁻ mg/Nr	175 n3	1	8 / 0.2	Two	Stage Water Scrubber		
	<ul> <li>Details of gas</li> <li>Estimation of</li> <li>Requirement of</li> <li>wise and Tota</li> <li>Yearly generation</li> <li>Sound manage</li> </ul>	eous raw n process ga of the scru l) tion of all t ement in H	naterials as emiss bbing m bleed liq W matri	s used in sion (Proc nedia (KL juors (MT x.	propo duct w per Da /KL pe Requ	osed p vise a ay) co er An uire	oroject nd Total) onsidering num) as n Solutio	g solub nention	ility (Product ed above and it		
5	Product	Gaseou s Raw Material	Proce ss Gas Emiss ion	Total Emiss ion (MT/D ay)	men Scru ng Mec (KL Da	t of Ibbi g dia Per y)	n / bleed liquors (KLD)	Solu bility (%)	Solution / Bleed liquors (MT/Annum)		
I	(2- (chloromethyl)- 3,4- dimethoxypyridi	Thionyl chloride	SO2	0.2	0.8 (Cau	30 Istic	1.0	> 90	365 MT/Annum (18-20%		

2									- 4-
	Benz	yl Chloride	Chlorine Gas	HCI/ CI2	0.45	1.05 (Caustic + Water)	1.5	> 90	547 MT/Annum (25-30% NaCl/ NaOCl)
3	Ві	ronopol	Bromine	HBr	0.30	0.7 (Caustic + Water)	1.0	> 90	365.0 MT/Annum (25-30% NaBr/HBr)
4	Tele	emisartan	Fuming Nitric Acid	NO ₂	0.07	0.43 (Caustic + Water)	0.5	> 90	182.0 MT/Annum (10-15% NaNO2)
5	Clari	thromycin	Clarioxi me	NH3	0.24	0.56 (Water)	0.8	> 90	292 MT/Annum (30% Liq. Ammonia)
E-4		Fugitive	emission d	etails with	its mitia	ation meas	ures.		
	<ul> <li>Pro</li> <li>Pro</li> <li>Pro</li> <li>Mo</li> </ul>	ovision of m oper preven nitoring and	echanical se tive mainter d preventive	eals in pu nance of r maintena	mps oofs and ance of v	seals for ta alves, flang	anks es, joints,	etc.	
F	<ul> <li>Fugare coll</li> <li>coll</li> <li>For cor</li> <li>Gree</li> <li>All</li> <li>Ove haz</li> </ul>	a, shall be lector. particulate trol particu een belt will dusting system transfer poi erflow system ardous ma Hazardou (As per the H Note: Pr Re pe b Qu ca b Di	collected the collected the late / dust emi late / dust e be develop stem will be free m with retu terial overfle use waste lazardous and C corities for euse/Recycle ermission, T- uantificatio sposal to s	hrough he issions fro mission fro ped along provided ully closed ully closed ully closed ully closed ully closed ully closed ully closed ully closed un line to ow. <b>HW Man</b> le within p SDF/CHV on of haza shall be in scrap ven	(Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management	n areas, ce d ducts by soal handlin storage are premises product finis tank from b ent and Transbo t: Pre-proce Sell out to vaste shall ated in EM adors/trade	entrifuges, induced dr g system: ea. whing area. whing area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. whistar area. area. area. area. area. area. area. area. area. area. a	will be p will be p hent) Rules Process rs havin on mas separat	al loading, transfe controlled by dus will be sprinkled to provided to preven 2016. sing, ng Rule-9 s balance and ely.
F F-1 Fvi	<ul> <li>Fugare coll</li> <li>coll</li> <li>For cor</li> <li>Gre</li> <li>De</li> <li>All</li> <li>Ove haz</li> </ul>	a, shall be lector. particulate trol particu een belt will dusting system transfer poi erflow system ardous ma (As per the H Note: Pre Re per b U Ca Di Hazardou	collected the collected the late / dust emi late / dust e be develop stem will be ints will be free m with retu- terial overfle use waste lazardous and C corities for euse/Recycle ermission, T- uantifications sposal to su us waste me	hrough he issions fro mission fi bed along provided ully closed urn line to ow. Other Wastes <b>HW Man</b> le within p SDF/CHV on of haza shall be i scrap ven	om the c com coal the plant at solid p d. storage (Management oremises, /IH. Indous w ncorpor dors/ven ent matr	n areas, ce d ducts by soal handlin storage are premises product finis tank from b ent and Transbo t: Pre-proce Sell out to vaste shall rated in EM ndors/trade ix	entrifuges, induced dr g system: ea. shing area. batch tank undary Moverr essing, Co- actual use be based P details s ers is not a	chemica raft and Water w will be p hent) Rules Process rs havin on mas separate allowed	al loading, transfe controlled by dus will be sprinkled to provided to preven 2016. sing, ng Rule-9 ss balance and ely.
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F F-1 Exis	<ul> <li>Fugare coll</li> <li>Coll</li> <li>For cor</li> <li>Gre</li> <li>De</li> <li>All</li> <li>Ove haz</li> </ul>	a, shall be lector. particulate trol particu een belt will dusting system transfer point ardous ma Hazardou (As per the H Note: Pr Re Point Ca Point Azardou Ca Point Ca Point Ca Point Ca Point Ca Point Ca Point Ca	collected the collected the late / dust emi late / dust e be develop stem will be ints will be free m with retu terial overfle lazardous and C corities for euse/Recycle ermission, T- uantification sposal to s us waste m Specific Source	hrough he issions fro mission fro ped along provided ully closed urn line to ow. Other Wastes <b>HW Man</b> le within p SDF/CHV on of haza shall be in scrap ven manageme	(Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Management) (Managemen	n areas, ce d ducts by coal handlin storage are premises product finis tank from b atank from b t: Pre-proce Sell out to vaste shall ated in EM ndors/trade ix Quan (MT/An	entrifuges, induced dr g system: ea. shing area. batch tank undary Moverr essing, Co- actual use be based P details s ers is not a ntity num)	chemica raft and Water w will be p hent) Rules Process rs havin on mas separate allowed	al loading, transfe controlled by dus will be sprinkled to provided to preven 2016. sing, ng Rule-9 ss balance and ely.

1.	ETP Sludge	ETP	35.3/S CH-I	60.0	-	60.0	Collection,
2.	Spray Dryer Salt	Spray Dryer	35.3/S CH-I	72.0	-	72.0	Storage, Transportation,
3.	Process Waste (Inorganic)	Mfg. Process	28.1/S CH-I	1.2	-	1.2 (Sorbitan Mono Sterate)	nearest TSDF site.
4.	Used Oil/ Spent Oil	TFH, DG & Other Utilities	5.1/SC H-I	0.12	-	0.12	Collection, Storage, Transportation & Reuse as lubricant or sale to authorized re- refiners.
5.	Discarded Containers/ Bags/Liners	Raw Material Supplier	33.1/SC H-I	300. 0	-	300.0 (Nos. 10000 Container) (Nos. 10000000 Bags/Liners)	Collection, Storage, Transportation; Decontamination and Reuse or Sale to Authorized Vendor.
6.	Distillation Residue	Mfg. Process	20.3/S CH-I	14.4	60.6	75.0 (Existing:3.0& Proposed: Carvedilol-72)	Collection, Storage, Transportation & send to pre/co-
7.	Spent Carbon	Mfg. Process	28.3/S CH-I	-	16	16.0 (4,6-Dichloro pyrimidine)	processing units (cement industries) OR
8.	Spent Catalyst	Mfg. Process	28.2/S CH-I	-	30	30.0 (Carvedilol)	disposal at nearest CHWIF site.
9.	Spent	Mfg. Process	28.6/S	-	2161	<b>2161</b> (Carvedilol <b>)</b>	Collection, Storage, Handling & Subjected to distillation assembly to recover the solvent & Reuse within premise.
10.	Solvent	Stripper		9.0	-	9.0	Collection, Storage, Transportation &send to pre/co processing unit (Cement Industries) OR send to CHWIF.
11.	Scrubbing Solution	Scrubbe r	Sch-l/ 28.1	547. 0	-	547.0 (Benzyl	Collection, Storage &

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Jus	stification for s	pent solven	t generatio	on & Ca	ptive reu	Isea		
16.	Specification Product	(Batch Failure)	Scn-1/ 28.4	-	1.0	1.0	send to Pre /Co- processing unit or send to CHWIF	
	Off	Mfg.	Sah 1/				Collection, Storage Transportation &	
15.	Scrubbing Solution 25-30% Liq. Ammonia	Scrubbe r	Sch-I/ 28.1	-	292.0	292.0 (Clarithromycin)	Collection, Storage & Reuse within premises. (In the Mfg. process of –2- methoxy-5- sulfamoylbenzoic acid: 900 MT/Annum)	
14.	Scrubbing Solution 18-20% Sodium Sulphite (Na ₂ SO ₃ )	Scrubbe r	Sch-I/ 28.1	-	365.0	365.0 (2- (chloromethyl)- 3,4- dimethoxypyridi ne hydrochloride)	Transportation & Sell to End Users having permission under Rule-9.	
13.	Scrubbing Solution 25-30% NaBr/HBr	Scrubbe r	Sch-l/ 28.1	-	365.0	365.0 (Bronopol)	Collection, Storage,	
12.	Scrubbing Solution 10-15% NaNO ₂	Scrubbe r	Sch-l/ 28.1	-	182.0	182.0 (Telmisartan)		
	Scrubbing Solution 25-30% NaOCI						Spray Dryer.	
	25-30% NaCl					Chloride)	treated into in- house ETP&	

Product Name	Solvent	Fresh Qty. Used MT/Day	Qty. Recovered MT/Day	Qty. Used MT/Day	Storage At a Time	
	IPA	0.06	1.54	1.60	200 Lit. X 9 Nos. (1.8 KL)	
Cr. P. Carvadilal	Toluene	0.11	2.06	2.17	200 Lit. X 12 Nos. (2.4 KL)	
GrB Carvedilor	Cyclohexane	0.05	1.19	1.24	200 Lit. X 7 Nos. (1.4 KL)	
	Ethyl acetate	0.05	1.13	1.18	200 Lit. X 7 Nos. (1.4 KL)	
Total M	Total MT/day		5.92	6.19		
Total MT/	Annum	99.28	2160.68~2161 .0	2259.96		
F-2 Membership details of TSDF, CHWIF etc. (For HW management)						

Details	of Membersh M/s_BEIL_A	nip letter no. & Da nkleshwar(Vide l	ate with spare	e capacity of the	e Common Fa ated: 26/03/20	cility. 21)		
F-3 Details of Non-Hazardous waste & its disposal (MSW and others)								
<b>G Solvent management</b> , VOC emissions etc.								
GSolvent management, voc emissions etc.G-1Brief Note on types of solvents, Details of Solvent recovery, % recovery, reuse of							se of	
recovered Solvents etc.								
Pro	duct Name	Solvent	Qty. Used MT/MT	Qty. Recovered MT/MT	Distillation Residue	Total Losses Fresh	Solvent Recover y %	
IPA 1.92 1.84 0.0480 0.0768 96								
<b>^</b>	o m co alti o l	Toluene	2.60	2.47	0.0910	0.1300	95	
	arvediioi	Cyclo hexane	1.49	1.43	0.0373	0.0596	96	
		Ethyl acetate	1.42	1.36	0.0387	0.0600	96	
G-2	Brief No	ote on LDAR pro	pposed:					
	Frequency of Actions to be Length of tim Actions that	f monitoring. e taken if a leak is ne in which an att must be taken if a ping and reporting	empt to repair a leak cannot	ir the leak must be repaired wi	be performed	1. 5.		
G-3	VOC en	nission sources	and its mitiga	tion measures				
	<ul> <li>Minimum number of flanges, joints and valves in pipelines.</li> <li>To eliminate chances of leakages from glands of pumps, mechanical seal will be provided at all solvent pumps.</li> <li>All the rotating equipments like pumps will be installed with Mechanical Seals to arrest any</li> </ul>							
	sort of emiss	ions. Ind scrubber pos	t Reactor with	o cooling arrang	rement			
N				a stick of series	jernent.			
×	in particular to be ensure	solvents through d.	hoods and c	lucts by induce	d draft, and c	ontrol by o	condenser	
$\checkmark$	In case the smaterial and	small spillage or collect the conta	leakage obs minated chin	erved, first pou a clay (vermicu	ur the china c late) and send	lay (vermi d to ETP.	culate) on	
$\triangleright$	If the spillage Electric Spar	e is of inflammab k.	le liquid, swit	ch off all the po	ower supply in	the area	to prevent	
$\triangleright$	Two condens	sers will install wi	ith cooling wa	ater and chilled	brine to recov	er the solv	/ent.	
Primary Condenser HE-01: Cooling Tower water or Chilled water at 5 °C will be used to condense the solvents depend on the vapor pressure at its operating conditions and the non-condensed vapors will be condensed in a Secondary Condenser.								
	VOC Trap C Solvent which	Condenser HE-02	2: Chilled Brin Secondary c	ne at -15 °C v ondenser	vill be used to	o trap any	traces of	
<ul> <li>Solvent which is slipped from Secondary condenser.</li> <li>Emission of VOCs can be trapped from breathing and loading losses from storage tanks, venting of process vessels, leak from piping and equipment by means of hood connected with blower and send to condenser as shown in following diagram.</li> <li>Condensed VOCs will be send to spent solvent recovery plant.</li> </ul>								
Н	SAFET	Y details						

ę	S.N	Name of chemical	Quantity (Nos.)	Total (Nos.)	Total Qty. to be store (KL)	
		N	on-PESO 3 Ta	ank		-
	1	Hydrochloric Acid	5 KL	1 Nos.	5 KL	-
	2	Nitric Acid	5 KL	1 Nos.	5 KL	
	3	Caustic sol. (NaOH Sol.)	5 KL	1 Nos.	5 KL	
Brief not	<u>te on</u>	storage of Hazardous che	emicals in Tar	<u>iks</u>		
Brief not Bags etc Safety M ✓ S ✓ C ✓ P ✓ P ✓ C ✓ D rc ✓ M fla	te on c. leasu fome rum s LP ty roper fondu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu froper condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu condu c	storage of Hazardous che ires for Drum Storage area chemicals will be received storage area. pe light fittings will be provide r ventilation will be provided r label and identification boa ictive drum pallets will be pro- handling trolley / stackers/fo with local exhaust and static als will be stored as per its able, corrosive and toxic che ng and other spark, flame ge	emicals other a: at plant in dru ded. in go down. rd /stickers will ovided. ork lift will be us earthing provis s compatibility emical drums s enerating item	than Tanks i.e ms by road tru be provided ir sed for drum h sion will be ma study and sep torage. will be banned	e. Drum, Barrels, Car uck and stored in a se n the storage area. andling. Separate disp de. parate area will be m from the Gate.	boys epara bensir ade f
Safety d	<u>etails</u> f	s of Hazardous Chemicals Safety measures	<u>:</u>			
Hazard Chemic	ous cals					
		<ul> <li>Storage tank w</li> <li>Tanker unload</li> <li>Caution note a unloading area</li> <li>NFPA label wil</li> <li>Required PPE gumboot, Resp</li> <li>Neutralizing ag</li> <li>Safety shower storage area.</li> <li>Material will be</li> <li>Dyke wall will provision.</li> <li>Double drain v</li> <li>Level gauge w</li> <li>Safety permit prepared and transporters a Hazardous ch</li> <li>Fire hydrant installed.</li> </ul>	All be stored av ing procedure and emergence and trained all be provided. Is like full bo piratory mask e gent will be kep , eye wash wi handled in clo be provided to alve will provided ill be provided to alve will provided for loading for loading i implemented and will be t emicals. system with j	way from the p will be prepare y handling pro l operators. dy protection etc. will be provent ready for tack th quenching the ose condition in ose condition in all storage tak led. on all storage tak unloading of the construction of the construct	rocess plant. d and implemented. ocedure will be display PVC apron, Hand g vided to operator. kle any emergency spi unit will be provided i n pipe line. nks, collection pit with tanks. hazardous material v RD will be provided ansportation Emerger	yed a ploves illage. n acio valve vill be to al ncy o will be
		Safety Measures of ✓ Leakage / sp ✓ Tank shall be	f Non PESO T illage mitigatio e rubber lined t	<b>ank</b> n plan o prevent the o	corrosion	
		<ul> <li>✓ Dyke wall sn</li> <li>✓ Rubber type</li> </ul>	hand gloves a	nd chemical sp	blash goggles and full-	face

	cartridge type mask and PVC apron shall be used while manual
	✓ Lime shall be readily available during leak to neutralize the spill
	material
	<ul> <li>Safety snower, eye wash with quenching unit will be provided in acid storage area</li> </ul>
	Storage area. $\checkmark$ Material will be bandled in close condition in nine line
	$\checkmark$ Double drain valve will be provided
	✓ Level gauge will be provided on all storage tanks.
	Fire hydrant system with jockey pump as per TAC norms will be installed
	sility of PESO.Not Applicable
H-2 <b>Type</b> (Hydr	es of hazardous Processes involved and its safety measures: ogenation process, Nitration process, Chlorination process, Exothermic Reaction etc.)
Type of	Safety measures including Automation
Process	
Sulphonation	Provisions of safety valve &rupture disk on reactor.
/ Chlorination	Provisions of auto dumping vessel. Description DVC entropy Hand aloves, support
(Chiomation	Respiratory mask etc. will be provided to operator.
with Thionyl	To avoid runaway reaction TC charging will be done gradually &
Chloride)	slowly.
,	> Charging will be done only through closed line and system. Scrubber
	attached with closed system.
	Make sure the absorber unit (two stage Alkali scrubber) is working
	and capable of handling vented SO2 / HCI fumes.
	Neutralizing agent will be kept ready for tackle any emergency amilland
	Spinage.
	<ul> <li>For Thionyl Chloride evacuate area in down wind direction up to 0.3 km (</li> </ul>
	300 meter) in small spillage.
	Emergency siren and wind sock will be provided.
	> Tele Communication system and mobile phone will be used in case of
	emergency situations for communication.
	Total close process will be adopted for Thionyl chloride charging.
	Caution note and emergency first aid will be displayed and train for the course to all emergency.
	same to all employees.
	<ul> <li>First Alu Doxes will be available in process area.</li> <li>Emergency organization and team will be prepared as per On site-Off site.</li> </ul>
	emergency planning
	Emergency team will be prepared and trained for scenario base
	emergency. Like Toxic control team, Fire control team, First aid team,
	communication and general administration team, Medical team etc.
	> Do not touch damaged containers or spilled material unless wearing
	appropriate protective clothing.
	Use water spray to reduce vapors; do not put water directly on leak, spill
	area or inside container. Keep combustibles (wood, paper, oil, etc.) away
	from spilled material.
	Cover with DRY earth, DRY sand or other non-compustible material followed with plastic sheet to minimize spreading or contact with rain
Bromination	<ul> <li>All end nozzles in bromine charging hose will be blinded after use</li> </ul>
	Charging of bromine will be done when reactor is in vacuum and POP
	coated funnel will be used during charging.
	> Excess bromine will be neutralize or discharged by adding Sodium
	Bisulfite& Sodium thiosulfite.

	> Make sure the absorber unit (scrubber) is working and capable of
	handling vented bromine fumes.
	Structure of bromine bottle area will be periodically inspected to ensure stability.
	Personnel employed with bromine handling are made aware of potential
	hazards of bromine and of appropriate first-aid measure.
	> Exhaust hood connected with alkali scrubber and ventilation system will be
	available. Exhaust hood has been provided to maintain to concentration of
	bromine vapor well below PEL.
	Work instructions for bromine charging will be displayed in local language/Hindi
	Safety shower and eve-wash fountains will be available nearby handling
	and charging facility. The location of such item will be inspected and tested
	at fixed interval to make sure that it is in good condition.
	Hypo solution, lime water slurry or soda ash solutions will be available so
	as to pour them over a liquid bromine spill on the floor. The bromine and
	neutralizer is then washed to the sump with cold water hose.
	Personal Hygiene – the following personal protective equipment will be used
	USEO.
	etc
	<ul> <li>Only trained employees handled bromine charging. Training will be given to</li> </ul>
	employees for bromine handling and charging.
Nitration	SOP will be displayed for safe charging of Nitric acid for nitration process.
	Required PPEs like full body protection PVC apron, Hand gloves,
	gumboot, Respiratory mask etc. will be provided to operator at time of
	nitric acid charging.
	Make sure the absorber unit (two stage Alkali scrubber) will be
	working and capable of handling vented NO2 fumes.
	Neutralizing agent will be kept ready for tackle any emergency spillage.
	Safety Shower and eye wash will be provided near process area.
	Fotal close process will be adopted (from storage tank to measured vossel & then to reacter) for Nitric Acid charging
	Coution note and emergency first aid will be displayed and train for the
	Caution note and emergency first aid will be displayed and train for the same to all employees
	<ul> <li>First Aid Boxes will be available in process area</li> </ul>
	<ul> <li>Prevention measures for runaway reaction of nitration reaction.</li> </ul>
	Instrumentation control –Interlock. Rotameter. DCS. Level alarms
	TIC –Temp Indicator Controller- of jacketed reactor (Gradually Charging
	material to maintain rate of rise of temperature Temperature sensor
	- Chilling Plant, Temp Range of Reaction: 25 to 30 degree
	centigrade Pressure · Atmospheric)
	Emergency control measures:
	<ul> <li>Provision of Dumping vessel of the contents of the nitrator</li> </ul>
	underneath reactor: the contents will be neutralized (by Alkali) in
	catch point. It will be sent to CF (Co-Processing/CHWIF/TSDF).
Hydrogenati	DCS base process controls and operation of plant will be installed.
on	All electrical equipment's shall be installed as per Hazardous Area
	Classification.
	Total enclosed process system.
	Instrument & Plant Air System.
	Nitrogen blanketing in Hydrogenation reactor.
	Emergency dumping vessel will be provided during unforeseen

	circumstances.
	Safety valve and Rupture disc provided on reactor.
	> Cooling. Chilling and alternate power arrangement have been made on
	reactor.
	Process area and Hydrogen cylinder shall be far away as per standards
	practice.
	$\rightarrow$ PRV station with shut off value, safety value provision will be made for
	hydrogenation reaction safety.
	> Standard Operating procedure shall be followed during operation of
	Hydrogen Gas charging in to reactor and after completion of reaction
	Nitrogen purging will be done.
	Flame arrestor will be provided on vent line of reactor and it will be
	extended above the roof level
	<ul> <li>Safe Catalyst charging method will be adopted</li> </ul>
	<ul> <li>SOP will be displayed and operators will be trained for the same</li> </ul>
	<ul> <li>Static parthing and electric parthing (Double) will be provided</li> </ul>
	Static earthing and electric earthing (Double) will be provided.
	Sumpers for static eartining on pipeline hanges of hammable chemical will be provided
	be provided. Hydrogon gas detector will be installed for early detection of gas look
Chlorination	Chlorine Emergency Kit will be procured and kept ready at process
(Chlorine	site
Gas)	Chlorine Hood with blower will be provided with scrubbing
	arrangement.
	SCBA sets will be kept ready at site.
	Safety Shower and eye wash will be provided in process area.
	> Chlorine absorption system will be provided. In case of chlorine
	leakage in chlorine shed it will be suck through blower and it will be
	scrubbed in Caustic scrubber.
	Emergency siren and wind sock will be provided.
	Tele Communication system and mobile phone will be used in case of
	emergency situations for communication.
	First Aid Boxes and Occupational health centre will be made at site.
	Emergency organization and team will be prepared as per On site-Off site emergency plenning
	Site emergency planning.
	Full body protection suite and other FFES will be kept ready at site. Emergency team will be prepared and trained for scenario base
	emergency Like Toxic control team. Fire control team. First aid team
	Communication and general administration team. Medical team etc.
	Evacuate the area in down wind direction
	> For Chlorine evacuate area in down wind direction up to 0.4 km (400
	meter) in small spillage and in case of large spillage, evacuate the area
	in down wind direction 3.5 kms (3500 meters).
	SOP will be prepared for safe charging of Chlorine Cylinders.
	Cylinders handling EOT crane will be installed in Chlorine shed area
	for safe Cylinders handling.
	Safety Valve will be provided on chlorine header line and it will be
	connected to caustic scrubber.
	Satety valve will be provided on vaporizer header and outlet of safety valve some stad to comuch or
	valve connected to scrubber.
	<ul> <li>Flow and temperature controllers will be provided on process line.</li> <li>Chloring Gas detectors will be provided in process area.</li> </ul>
H-3 Dot	ails of Fire Load Calculation
	255 th meeting of SFAC-Gujarat Dated 05 08 2021

-,					
	Total Plot Area:	1088.0			
	Area utilized for plant activity:	94.50 (G+2)			
	Area utilized for Hazardous	81(G+2)			
	Chemicals Storage:				
	Number of Floors:	G+2			
	Water requirement for firefighting in KLD :	14987			
	Water storage tank provided	2,00,000 (50000 +	150000)		
	for firefighting in KLD:	(Existing + Propose	ed)		
	Details of Hydrant Pumps:	Fire water Pump will be available. We will have 01 No's of electrical fire water Pump located at pump house having capacity 4550.0 litres/min and 01 No's of Diesel pump having capacity 4550.0 litres/min. Apart from this we have 01 Nos Jockey Pumps of capacity 1080.0 litres/min which maintains the Fire water Header Pressure at 8.0 kg/cm ² .			
	Nearest Fire Station :	Panoli Fire Station			
	Applicability of Off Site Emergency Plan:				
Η	I-4 Details of Fire NOC/	Certificate:			
		Applied	d		
Η	I-5 Details of Occupation	onal Health Centre	(OHC):		
-					
	Number of permanent E	mployee :	10		
	Number of Contractual p	erson/Labour :	15		
	Area provided for OHC:		16.0		
	Number of First Aid Box	PC .	10		
	Number of First Alu Box				
	Nearest General Hospita	al :	Sarvajanik Hospital, Sanjali		

- During meeting, Committee noted that PP presented technical justification regarding no additional waste water generation from process even though addition of 130 API and its intermediate products in existing plant of simply basic chemical and organic salt products. Also PP presented green belt, only 9 % within premises as such as query generated in earlier meeting dated 06.07.2021 and additional greenbelt letter from GIDC for green belt of 24 % outside premises in GIDC area.
- Committee found submission of project proponent satisfactory.
- After detailed discussion, Committee unanimously decided to recommend the project to SEIAA, Gujarat for grant of Environment Clearance with the following specific condition:

# SPECIFIC CONDITIONS:

- Project Proponent (PP) shall strictly abide by the outcome/decision of Hon'ble Supreme Court of India in Civil Appeal no. 8478/2020 regarding operation of the Hon'ble NGT orders dated 10/07/2019 & 14/11/2019.
- 2. PP shall comply conditions of any subsequent amendment or expansion or change in product mix, after 255th meeting of SEAC-Gujarat, Dated 05.08.2021

the 30th September 2020, considered as per the provisions in force at that time as mentioned in the Notification vide S.O. 1223 (E) dated 27/03/2020.

- 3. PP shall carry out proposed project/activities in respect of Active Pharmaceutical Ingredients (API) as per the amended EIA Notification vide S.O. 1223 (E) dated 27/03/2020 and any subsequent amendments.
- 4. PP shall submit six monthly compliance report of Environmental Clearance without fail and the same shall be critically assessed by the regulatory authority.
- 5. PP shall not manufacture more than three or four (3-4) products from product list as per details submitted by PP.
- 6. GPCB shall ensure compliance of direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP and also that the pollution load is not increased in the CPA/SPA for the compliance of Hon'ble NGT order.
- 7. Unit shall install CEMS [Continuous Emission Monitoring System] in line to CPCB directions to all SPCB vide letter no. B-29016/04/06PCI-1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis. [For Small/Large/Medium (Red Category) & Whichever (Air emission & Effluent discharge) is applicable].
- 8. Close loop solvent recovery system with adequate condenser system shall be provided to recover solvent vapours in such a manner that recovery shall be maximum and recovered solvent shall be reused in the process within premises.
- 9. Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines. LDAR Logbooks shall be maintained.
- 10. PP shall maintain secure distance between existing food additive plant from proposed API plant considering environment and health point of view for proposed API and its intermediate production.

#### <u>WATER</u>

- 11. Total water requirement for the project shall not exceed 22.80 KLD. Unit shall reuse 2 KLD of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 20.80 KLD and it shall be met through GIDC water supply only. Prior permission from concerned authority shall be obtained for withdrawal of water.
- 12. Total industrial effluent generation from the project shall not exceed 13.70 KLD after expansion.
- 13. Total Industrial effluent shall be treated in ETP followed by solvent stripper and then treated effluent shall be evaporated in in-house spray dryer.
- 14. Unit shall feed wastewater to in-house spray dryer only after ensuring content of effluent for COD/VOC so as not to get air borne during evaporation in order to achieve no adverse impacts on Environment and Human Health.
- 15. Domestic wastewater generation shall not exceed 2.50 KL/day for proposed project and it shall be treated in ETP. It shall not be disposed off through soak pit/ septic tank.

#### AIR

- 16. Unit shall not exceed fuel consumption and provide APCM and Stack height as mentioned in flue gas matrix.
- 17. Unit shall provide APCM and stack height as mentioned in process gas matrix.

### HAZARDOUS & SOLID WASTE

- 18. All hazardous solid waste shall be managed as mentioned in hazardous waste matrix.
- 19. The unit shall submit the list of authorized end users of hazardous wastes along with MoU signed with them at least two months in advance prior to the commencement of production. In the absence of potential buyers of these items, the unit shall restrict the production of the respective items.

#### **GREENBELT AREA**

20. The PP shall develop green belt within premises (100 sq. Meter within premises + 260 sq. Meter outside premises i.e. total 360 Sq. m i.e. 33 % of the total plot area) as per the undertaking submitted before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.

#### 21. Safety & Health:

- a) PP shall obtain PESO permission for the storage and handling of hazardous chemicals.
- b) PP shall provide Occupational Health Centre (OHC) as per the provisions under the Gujarat Factories Rule 68-U.
- c) PP shall obtain fire safety certificate / Fire No-Objection certificate (NOC) from the concern authority as per the prevailing Rules / Gujarat Fire Prevention and Life Safety Measures Act, 2016.
- d) Unit shall adopt functional operations/process automation system including emergency response to eliminate risk associated with the hazardous processes.
- e) PP shall carry out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in the manufacturing area in case of any emergency or accident.
- f) PP shall install adequate fire hydrant system with foam trolley attachment within premises and separate storage of water for the same shall be ensured by PP.
- g) PP shall take all the necessary steps for control of storage hazards within premises ensuring incompatibility of storage raw material and ensure the storage keeping safe distance as per the prevailing guidelines of the concerned authority.
- h) PP shall take all the necessary steps for human safety within premises to ensure that no any harm is caused to any worker/employee or labor within premises.
- i) Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.
- j) Unit shall never store drum/barrels/carboys of incompatible material/chemical together.
- k) Unit shall provide effective Isolation for Process area and storage of hazardous chemicals.

- I) Unit shall provide water sprinkler to the ammonia storage cylinder.
- m) Unit shall provide safety valve and rapture disc, as well as auto dump or auto quench/, suppress system for nitration vessel safety
- n) Unit shall provide effective fire hydrants, water monitors & foam application system at solvent storage tank farm area. Unit shall provide adequate safety system such as water sprinklers, water curtains, foam pouring system etc. to restrict cascade fire emergency in solvent tank farm.
- o) Unit shall Store Bromine Bottle in cool dry separate area, out of direct sunlight.
- p) Unit shall provide safety valve & rupture disc to the Hydrogenation vessel.
- q) Unit shall provide chlorine leakage control emergency kit and FRP hood with scrubber system for chlorine safety

12. SI	A/GJ/IND2/211526/2021	M/s. KLJ Petroplast Ltd	EC-Transfer
		Plot No. 909, 909/1 & 764, GIDC Jhagadia, Ta- Jhagadia, Dist-Bharuch	

- SEIAA, Gujarat has accorded Environment Clearance to M/s. KLJ Plasticizers Limited vide letter no. No.
   SEIAA/GUJ/EC/5(F)/390/2021 Dated 03/04/2021
- Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/211526/2021for name change from M/s. KLJ Plasticizers Limited to M/S. KLJ Petroplast Ltd.
- This proposal was considered in the SEAC meeting dated 05.08.2021. During the meeting, Committee noted that SEIAA, Gujarat has issued Environment Clearance [EC] to M/s KLJ Plasticizers Limited for setting up manufacturing plant of "Synthetic Organic Chemicals" at Plot No. 909, 909/1 & 764, GIDC Jhagadia, Ta-Jhagadia, Dist-Bharuch.
- During meeting, Committee asked for status of production plant, PP informed that they had received EC order recently on dated 03/04/2021 and construction of production plant work is going on.
- PP presented GIDC letter for plot transfer in name of M/s. KLJ Petroplast Ltd of dated 22/01/2021 and also presented Certificate of Incorporation letter from respective authority in name of KLJ Petroplast Limited vide letter dated 10.10.2020.
- PP presented old management and new management Director List.

After detailed discussion, Committee unanimously decided to recommend the project to SEIAA, Gujarat for change in name from M/s KLJ Plasticizers Limited to M/S. KLJ Petroplast Ltd in Environment Clearance issued by SEIAA vide letter no. SEIAA/GUJ/EC/5(F)/390/2021 Dated 03/04/2021 with following specific condition,.

1. Unit shall strictly complying each and every conditions accorded by SEIAA in EC order no.

SEIAA/GUJ/EC/5(F)/390/2021 Dated 03/04/2021 by new management as per details submitted by PP.

13.	SIA/GJ/IND2/216009/2021	M/s. Adani Cement Industries Limited	EC-Transfer
		Survey No. 136/P, 137/P, 138/P, 139/P, 140/P, 141/P,	
		144/P, 145/P, 151/P, 152/P, 153/P, 154/P, 155/P,	
		162/P, 174/P, 175/P, 176/P, 178/P, 179/P, 187/P,	
		188/P, 189/P, 190/P, 191/P of Village Dahej and Survey	
		No. 125/P, 124/P of Village Lakhigam in Dahej Industrial	
		Estate, Tal.: Vagra, Dist.: Bharuch	

- SEIAA, Gujarat has accorded Environment Clearance to M/s. Adani Cementation Limited vide letter no.
   No. SEIAA/GUJ/EC/3(b)/633/2019, Dated 03/05/2019
- Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/216009/2021 for name change from M/s. Adani Cementation Limited to M/S. Adani Cement Industries Limited.
- This proposal was considered in the SEAC meeting dated 05.08.2021. During the meeting, Committee noted that SEIAA, Gujarat has issued Environment Clearance [EC] to M/s Adani Cementation Limited for setting up manufacturing plant of "Stand Alone Cement Grinding Unit'" at Survey No. 136/P, 137/P, 138/P, 139/P, 140/P, 141/P, 144/P, 145/P, 151/P, 152/P, 153/P, 154/P, 155/P, 162/P, 174/P, 175/P, 176/P, 178/P, 179/P, 187/P, 188/P, 189/P, 190/P, 191/P of Village Dahej and Survey No. 125/P, 124/P of Village Lakhigam in Dahej Industrial Estate, , Tal.: Vagra, Dist.: Bharuch.
- Committee noted that PP asked for name change proposal with following amendment in EC order dated 03/05/2019,

Replace 'Adani Cementation Limited' with 'Adani Cement Industries Limited' in

- a. Page 1. Sub. Line 1
- b. Page 1. Para 2 Line 1
- c. Page 5. Issued to Line 1
- During meeting, Committee asked for status of production plant, PP informed that they had yet not started construction activity at proposed plot. Gujarat Pollution Control Board has issued Consent to Establish (CTE) for above mentioned proposed project vide File No. GPCB/(PCB ID-82422) dated 25.05.2021.
- PP presented Certificate of Incorporation letter from respective authority in name of Adani Cement Industries Limited vide letter dated 10.10.2020.
- PP presented old management and new management Director list.
- Looking to proposal presented by PP, Committee insisted for following documents submission,
  - 1. GIDC plot possession lletter regarding proposed plot transfer in name of M/s. Adani Cement Industries Ltd along with connection between Adani port, wholly owned subsidiary of

'AdaniEnterprisesLimited' and Adani Cement Industries Ltd.

- NOC of old unit management in their letter pad with all director/partner duly signed that hey are willing for name change in EC order dated 03/05/2019.
- Notarised undertaking for strictly complying conditions mentioned in EC order by directors of new management and also assurance regarding that name change shall not hamper any change in product and raw material as accorded by SEIAA vide EC order dated 03/05/2019.

# After detailed discussion, Committee unanimously decided to consider the proposal in one of upcoming meeting after submission of following documents,

- GIDC plot possession lletter regarding proposed plot transfer in name of M/s. Adani Cement Industries Ltd along with connection between Adani port, wholly owned subsidiary of 'Adani Enterprises Limited' and Adani Cement Industries Ltd.
- 2. NOC of old unit management in their letter pad with all director/partner duly signed that hey are willing for name change in EC order dated 03/05/2019.
- Notarised undertaking for strictly complying conditions mentioned in EC order by directors of new management and also assurance regarding that name change shall not hamper any change in product and raw material as accorded by SEIAA vide EC order dated 03/05/2019.

14.	SIA/GJ/IND2/216823/2021	M/s. Assence Pharma Pvt. Ltd	EC-Transfer
		Survey nos. 591, 592, 593, 594, 595/A, 596, 597, 598,	
		606, 607, 608, 609/A, 610/A, 611/A, 612/A, 613,	
		Petrochemical Complex Notified Area, Village: Ranoli,	
		Tal. Vadodara, Dist. Vadodara	

- SEIAA, Gujarat has accorded Environment Clearance to M/s. S.G.Phrmaceuticals vide letter no. No.
   SEIAA/GUJ/EC/5(F)/456/2017 Dated 29/04/2017
- Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/216823/2021on dated 08/07/2021, for name change from M/s. S.G.Phrmaceuticals to M/S. Assence Pharma Pvt. Ltd.
- This proposal was considered in the SEAC meeting dated 05.08.2021. During the meeting, Committee noted that SEIAA, Gujarat has issued Environment Clearance [EC] to M/s S.G.Phrmaceuticals for setting up manufacturing plant of "Synthetic Organic Chemicals" at Survey nos. 591, 592, 593, 594, 595/A, 596, 597, 598, 606, 607, 608, 609/A, 610/A, 611/A, 612/A, 613, Petrochemical Complex Notified Area, Village: Ranoli, Tal. Vadodara, Dist. Vadodara.
- PP presented justification regarding name change as follows,
  - The EC application was made in the name of M/s. SG Pharmaceuticals based on land allotment letter dated 04/11/2015 issued by Notified Petrochemicals Complex Authority.As can be seen that M/s. SG Pharmaceuticals has been shown in the allotment letter as "A Division of Ambalal Sarabhai Enterprise Ltd. (ASE)".

- However, there was <u>an amalgamation of SG Pharmaceuticals into Ambalal Sarabhai Enterprises</u> (ASE) Ltd vide High Court Order.
- At the time of submission of EC application in the year 25/01/2017, the present management was not aware about this amalgamation which took place almost three decades back. Now, <u>Ambalal Sarabhai</u> <u>Enterprises (ASE) intends</u> to give this project land bearing survey nos. 591, 592, 593, 594, 595/A, 596, 597, 598, 606, 607, 608, 609/A, 610/A, 611/A, 612/A, 613 having area as 48,000 sq.m., (as per details submitted in EC application), <u>on lease to M/s. Assence Pharma Pvt. Ltd.</u>.
- During meeting, Committee asked for status of production plant, PP informed that they had yet not started construction activity at proposed plot. Looking to EC order issued on dated 29/04/2017 and construction activity is yet not started by old unit, Committee insisted for justification with authenticated documents regarding still construction activity is not started at proposed plot along with photographs on Notarised undertaking of 300/-RS stamppaper.
- PP presented EC order in name of M/s S.G. Pharmaecuticals, Petro chemical complex notified area letter of dated 04/11/2015 showing M/s. S.G. Pharamaceuticals, a division of Ambalal Sarabhai Enterprise Limited and its survey no- 603(603-621,621/1,622 & 623),543( 545,577/1,577/2,578 to 580,585,586/1,586/2 & 586 to 601)601,547/1,550/1,549/1,548,584/1,583/1,581,574/2/A,574/1/A,573/1 & 546/1/1, an amalgamation of SG chemicals and Pharmaceuticals Limited with Ambalal Sarabhai Enterprises Private Ltd vide High Court Order dated 30/03/1981.Lease deed dated 02/06/2021 between Ambalal Sarabhai Enterprises Ltd and Assence Pharma Pvt. Ltd.
- Looking to proposal presented by technical expert of PP, Committee insisted for following documents submission,
  - Applicability of EC-transfer in name of M/s. Assence Pharma Limited from M/s. S.G.Pharmaceuticals ,looking to survey numbers mentioned in Petro chemical complex notified area letter of dated 04/11/2015 is differ than EC order dated 29/04/2017.
  - Justification with authenticated documents regarding still construction activity is yet not started at proposed plot eventhough EC order issued on dated 29/04/2017 along with photographs, on Notarised undertaking of 300/-RS stamppaper.
  - Chief Officer, Petro chemical complex notified area letter regarding proposed plot transfer in name of M/s. Assence Pharma Limited along with connection between S.G.Pharmaceuticals and M/s. Ambalal Sarabhai Enterprise, looking to High court order showing Amalgamation company name differ than proposed by PP.
  - 4. NOC of old unit management M/s. S.G.Phramaceuticals in their letter pad with all director/partner duly signed that hey are willing for name change in EC order dated 29/04/2017.
  - Notarised undertaking for strictly complying conditions mentioned in EC order by directors of new management and also assurance regarding that name change shall not hamper any change in product and raw material as accorded by SEIAA vide EC order dated 29/04/2017.
  - 6. List of name of old partners with address in its letter pad of M/s Ambalal Sarabhai Enterprise and M/s.

S.G.Pharmaceuticals separately, duly signed ny old management.

 List of name of new directors with address in its letter pad of M/s Assence Pharma Limited, duly signed by new management.

# After detailed discussion, Committee unanimously decided to consider the proposal in one of upcoming meeting after submission of following documents,

- Applicability of EC-transfer in name of M/s. Assence Pharma Limited from M/s. S.G.Pharmaceutical, looking to survey numbers mentioned in Petro chemical complex notified area letter of dated 04/11/2015 is differ than EC order dated 29/04/2017.
- Justification with authenticated documents regarding still construction activity is yet not started at proposed plot eventhough EC order issued on dated 29/04/2017 along with photographs, on Notarised undertaking of 300/-RS stamp paper.
- Chief Officer, Petro chemical complex notified area letter regarding proposed plot transfer in name of M/s. Assence Pharma Limited along with connection between S.G.Pharmaceuticals and M/s. Ambalal Sarabhai Enterprise, looking to High court order showing Amalgamation company name differ than proposed by PP.
- 4. NOC of old unit management M/s. S.G.Phramaceuticals in their letter pad with all director/partner duly signed that hey are willing for name change in EC order dated 29/04/2017.
- 5. Notarised undertaking for strictly complying conditions mentioned in EC order by directors of new management and also assurance regarding that name change shall not hamper any change in product and raw material as accorded by SEIAA vide EC order dated 29/04/2017.
- List of name of old partners with address in its letter pad of M/s Ambalal Sarabhai Enterprise and M/s.
   S.G.Pharmaceuticals separately, duly signed by old management.
- List of name of new directors with address in its letter pad of M/s Assence Pharma Limited, duly signed by new management.

15.	SIA/GJ/IND2/203753/2021	M/s. Shree Ganesh Remedies Limited Unit-II	EC-Amendment
		Plot No. 6714/2- 6715, GIDC Ankleshwar,Ta-	
		Ankleshwar, Dist - Bharuch	

- During SEAC VC meeting on dated 05.08.2021, Project Proponent and their technical expert remain absent. PP has submitted letter via Email on dated 02/08/2021 stating that they would remain absent during meeting and withdraw application due to additional waste water discharge by unit at CETP of M/s. ETL ,not obtained by PP.
- In view of the above, Committee decided to recommend to permit project proponent for withdrawal of their application of Environmental Clearance and to delist the proposal from the list of pending applications & to close the file.

1	6 S	SIA/GJ/IND2/2168	60/2021 M/s. BAJAJ HEA	LTHCARE LTD.	EC-Amendment
			Plot No. 1717 &	1718,GIDC Estate,Panoli-394116,Ta	:
			Ankleshwar, Dist	: Bharuch	
•	This	s is an existing ind	organic unit and expansior	n project for manufacturing of "Synth	etic Organic Chemicals'
	[AP	I & its Interm	ediates] for which was	s accorded Environmental Clear	ance vide letter no
	SEL	AA/GUJ/EC/5(F)/	1334/2020 Date: 05/09/202	20.	
•	Nov	v, project propone	ent has applied online vide	proposal no. SIA/GJ/IND2/216860/2	021 for EC-Amendmen
	in E	C letter no. SEIA	A/GUJ/EC/5(F)/1334/2020	Date: 05/09/2020 for change of fu	el from cleaner fuel to
	soli	d fuel. The details	s are as under:		
	Sr.	Condition no.	As per EC	As per proposed amendment	Justification
	no.	Amendment is			
		proposed.			
	1	SECTION A.3 A	R		
		CONDITION	Sr No 4: Dollar	Sr No 4: Doilor	
		CONDITION	Sr NO 1: Boller	SI NO I: DOIler	Unit will not go with
		32.0			fuel.
		(Flue gas	Capacity : 2.0 TPH	Capacity : 2.0 TPH	
		Emission)			
			Fuel I leed : Natural Gas	Fuel Used: Natural Gas	Unit proposed following fuel-
					Natural
				Or	gas&Imported
			Quantity : 3246 SCM/day	Imported Coal	Cual.
				Quantity: 3246 SCM/Day	In-case of non- availability of any
				(Natural gas)	of them, they can
	Air		Air Pollution Control	Or	available fuel.
		Stack height		6 MT/day (Imported Coal)	
				a minuay (imported Oddi)	
				Air Pollution Control measures: Adequate Stack height(for Natural Gas)	

		•	1
		& MCS, Bag Filter & Water Scrubber (for Imported Coal)	
	St No 2: Poilor	Sr No 2: Poilor	
	Sr No 2: Boller	Sr No 2: Boller	
	Capacity : 5.0 TPH	Capacity : 5.0 TPH	
	Fuel Used : Natural Gas	Fuel Used: Natural Gas	
		Or	
	Quantity : 8117 SCM/day	ImportedCoal	
		Quantity: 3246 SCM/day	
	Air Pollution Control	(Natural gas)	
	measures : Adequate	Or	
	Stack height	16 MT/day (Imported Coal)	
		Air Pollution Control measures :	
		Adequate Stack height(for Natural Gas)	
		&	
		MCS, Bag Filter & Water Scrubber (for ImportedCoal)	

• PP was called for presentation in the SEAC meeting dated 05.08.2021.

During the meeting dated 05.08.2021, technical presentation made during the meeting by technical expert of PP, M/s Envycraft Environmental Services and project proponent.

PP presented that they have applied for EC-Amendment for change of fuel in earlier EC order.

- PP presented the following documents:
  - Revised flue gas matrix mentioning Natural gas or imported coal or agrowaste/briquette as fuel and Multicyclone separator, bag filter and water scrubber as APCM for solid fuel fired boiler.
  - ✓ Revised solid waste matrix mentioning quantity of generation and mode of disposal of fly ash.
- Committee insisted to use natural gas as priority fuel and only one solid fuel instead of three solid fuel in option for natural gas as fuel in boiler, PP agreed and later on revised fuel details along with notarised undertaking of showing Natural gas or imported coal as fuel, through e-maill.
- Committee found submission of project proponent satisfactory.
- <u>After detailed deliberation, Committee unanimously decided to recommend grant of EC Amendment</u> to SEIAA, Gujarat with additional condition as mentioned below and change in "Condition No. 32 " as follows and with remaining condition unchanged in EC granted by SEIAA, Gujarat vide Letter No. SEIAA/GUJ/EC/5(F)/1334/2020 Date: 05/09/2020.

# Additional Condition:

- 1. Unit shall use natural gas as a priority fuel. Imported coal shall be used in case of non-availability of Natural Gas as per undertaking submitted by PP.
- 2. Unit shall strictly complying GPCB guidelines for change of cleaner fuel to solid fuel for boiler.
- 3. Flyash generated from boiler management shall be as follows,

Sr. no.	Type/Name of Other wastes	Specific Source of generation (Name of the Activity, Product etc.)	Quantity (MT/Ann um)	Management of Wastes
1	Fly Ash	Boiler (Imported coal)	800.00	Collection, storage, transportation & send to Brick manufacturer as per Flyash Rules.

# Condition No. 32 shall now be read as under:

32. Unit shall not exceed fuel consumption for boilers, Thermo pack and D G Set as mentioned below:

Sr. No.	Stack attached to	Stack Height (Meter)	Fuel	Fuel Qty.	APCM	Permissible limit
1.	Boiler	30	Natural Gas	3246	MCS+ Bag Filter& Water	SPM

			(0.0		0.	0014/1	O a materia a		
			(2.0 TDU)		Or	SCIVI/day	Scrubbe	r SO _X	
			IPN)		ImportedCoal	Or	&	NO _X	
						6 MT/day	Adequate S Height	tack	
		2.	Boiler (5.0 TPH)	30	Natural Gas Or ImportedCoal	8117 SCM/day Or 16 MT/day	MCS+ Ba Filter & Wa Scrubbe & Adequate S Height	ag ater r tack	
		3.	(2.0 Lac KCal/hr)	30	LDO	0.15 KL/Day	Adequate S Height	tack	
			DG Set						
		4.	250 KVA	9	Diesel	150 lit/day.	Adequate S	tack	
			(Stand by)				ricigni		
17	. SI/	₹/GJ/IN	ID2/215854/	2021 <b>M/</b> Plc Re 44	<b>s. Omen Pharm</b> ot No. 631 To 63 evenue Survey N 0/P, Gidc Panoli	<b>a.</b> 9, 654 To 656 lo: 435/P, 436 , Tal: Ankleshv	, 2019-2027/5 5/P, 438/P, 43 war, Dist: Bha	EC-Amendi 5/10, 39/P And aruch	ment
•	This i which <b>02/06</b>	is Gree was 2 <b>/2021</b> .	enfield projec accorded	ct for mar Environm	nufacturing of "S ental Clearance	Synthetic Orga e vide letter	nic Chemical no. <b>SEIAA</b>	ls" [API & its Interm /GUJ/EC/5(F)/903/2	ediates] for 020 Date:
	Now	projec	t proponent	has annli	ed online vide p	roposal no SI		15854/2021 for EC-4	Mendment
Ĩ	in $EC$				(E)/903/2020		$\frac{1}{1} \text{ for change}$	a of fuel from close	nor fuel to
			ho dotaile a			at <del>o</del> . UZ/UU/ZUZ	i ioi chang		
	Solid				ו <del>ז</del> . יי				
	Sr. no.	vhichA	maition no. ir mendmentis posed.	spro	As per EC	As per pr amend	oposed Iment	Justification	
	1. 5	SEIAA/	GUJ/EC/5(f	)/71Unit s	shall not exceed	Unit shall not	exceed fuel	Briquettes of Bioco	bal
		9/2020	: A.3 Air: 33	fuel c	consumption for	consumption	for Boiler,	as an alternative fu	lel
				Boile	r, TFH and DG	TFH and D	OG Set as	for the utility in ca	se
				Set	as mentioned	mentioned bel	ow:	of non-availability	of

		holow:	Not			4500	Notur			
				uiai Ga	ລວ ພ ⊳⊡າ່ານ:∍'	4000	Ada			:0
		Natural Gas @ 4	500501	N/Day of	r Briquet	tes of	Adeq	uate A	PCM	WIII
		SCM/Day will	beBio	-coal(12	MT/Day	r) will	be	provid	ded	to
		used as a fuel	inbe	used as	a fuel in	Boiler	achie	ve norr	ns	
		Boiler & TFH.	& T	FH.						
		Diesel @ 15 Lite	r/Hr <mark>Die</mark>	sel @ 15	Liter/Hr	will be				
		will be used as a	fueluse	d as a fu	el in DG	Set.				
		in DG Set.								
2.	SEIAA/GUJ/EC/5(f)/71	All the hazardo	ous/All	the haz	zardous/	solid	Fly	ash	gener	ated
	9/2020: A.4 Air: 41	solid wa	astewas	ste mana	agement	shall	from	utility	will	be
		management s	hallbe	taken	care	as	addec	l as	S I	non-
		be taken care	asmei	ntioned b	elow.		hazar	dous w	aste	-
		mentioned below:	The	re are 1	4 Cateo	orv of	nazar			
		Thoro oro	1440-		+ Oalog	1 Non				
					waste (l.	e. riy				
		Hazardous wa	asteasn	i) genera	ted and	will be				
		generated and	willdisp	posed	as	per				
		be disposed as	perHaz	zardous	and	Other				
		Hazardous	andwas	ste (Ma	inageme	nt &				
		Other wa	asteTra	nsbounda	ary Mov	ement				
		(Management	&Rul	e), 2016.						
		Transboundary								
		Movement Ru	ıle).							
		2016								

- PP was called for presentation in the SEAC meeting dated 05.08.2021.
- During the meeting dated 05.08.2021, technical presentation made during the meeting by technical expert of PP, M/s. Aqua Air Environmental Engineering Pvt. Ltd and Project Proponent.
- PP presented that they have applied for EC-Amendment for change of fuel in earlier EC order.
- PP presented the following documents:
  - ✓ Revised flue gas matrix mentioning Natural gas or briquette of biocoal as fuel and Multicyclone separator, bag filter and water scrubber as APCM for solid fuel fired boiler and thermo pack.
  - ✓ Revised solid waste matrix mentioning quantity of generation and mode of disposal of fly ash.
- Committee found submission of project proponent satisfactory.
- <u>After detailed deliberation, Committee unanimously decided to recommend grant of EC Amendment</u> to SEIAA, Gujarat with additional condition as mentioned below and change in "Condition No. 33 and <u>Condition No. 41" as follows and with remaining condition unchanged in EC granted by SEIAA,</u> <u>Gujarat vide Letter No. SEIAA/GUJ/EC/5(F)/903/2020 Date: 02/06/2021.</u>

# Additional Condition:

- Unit shall use natural gas as a priority fuel. Briquette of bio coal shall be used in case of non-availability of Natural Gas as per undertaking submitted by PP.
- 2. Unit shall strictly complying GPCB guidelines for change of cleaner fuel to solid fuel for boiler and thermo

pack.

# Condition No. 33 shall now be read as under:

33. Unit shall not exceed fuel consumption for boilers, Thermo pack and D G Set as mentioned below:

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
1	Boiler (Capacity: 2.0 TPH)	30	Natural Gas or Briquettes	3390 SCM/Day or 9 MT/Day		MCS with Bag Filter + Water Scrubber
2	Thermic fluid heater (Capacity: 2 Lakh Kcal/ Hr)	30	Natural Gas or Briquettes	1110 SCM/Day or 3 MT/Day	SPM SO ₂ NOx	MCS with Bag Filter + Water Scrubber
3	D. G. Set (100 KVA)	11	HSD	15 Lit/hr		Adequate Stack Height

# Condition No. 41 shall now be read as under:

41.All the hazardous/ solid waste management shall be taken care as mentioned below:

Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category & Schedule as per HW Rules.	Quantity (MT/ Annum)	Management of HW
1	Discarded Drums/Bags	Raw Material and Storage	Sch-I/33.1	6	Collection, Storage, Transportation and sell to Register Re-processors after decontamination.
2	Used / Spent Oil	Equipment & Machinery	Sch-I/5.1	1.5 KL	Collection, Storage, Transportation and sell to registered recycler.
3	ETP Sludge	ETP	Sch-I/35.3	42	Collection, Storage, Transportation and Disposal at TSDF site.
4	Distillation Residue	Solvent Distillation Plant	Sch-I/20.3	60	Collection, Storage, Transportation and sent to
5	Organic Residue	Process (Product	Sch -I/28.1	120	Incineration facility of

		No:9)			BEIL, Ankleshwar.	
6	Data expired or Off Specification	From mfg. Process	Sch-I/ 28.4	3	-	
7	Spent Carbon	Process (Product No: 1)	Sch-1/28.2	5	_	
8	Spent Solvent	Process	Sch-I/28.6	2800	Collection, Storage, Distill inhouse and Reuse within premises for same product.	
9	Hydrochloric acid solution (30%)	Scrubber	Sch-II- Class- B15	220		
10	Sodium Sulphite (22%)	Scrubber	Sch -l/28.1	170	Collection, Storage	
11	HBr Solution (30%)	Scrubber	Sch-I/28.1	120	−Transportation and sold to end user having permission under rule-9.	
12	Liq Ammonia	Scrubber	Sch -I/28.1	120	_	
13	Sodium Nitrite Solution (22%)	Scrubber	Sch -I/28.1	170	-	
14	Spent Catalyst	Process (Product No:10 & 30)	Sch-I/28.2	60	Collection, Storage Transportation and sent to regenerator having rule s permission.	
After /	Amendment Fly A	sh will be added as	a Non Hazaro	dous Waste		
15	Fly Ash	Utility		210	Collection, Storage Transportation and sent to brick manufacturer.	
	1				L	
SIA/G	GJ/IND2/215842/202	21 M/s ELBEE AQU			EC-Amendment	
		Plot No. C1/1018 Ankleshwar-3941	, Phase-1 GID	)C, Panoli, T haruch-3941	al: 16	
			-, <u>-</u>		-	

<ul> <li>Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/215842/2021 for EC-Amendment</li> </ul>							
ir	in EC letter no. SEIAA/GUJ/EC/5(F)/843/2020 Date: 07/07/2020 for change of fuel from cleaner fuel to						
li	<b>quid fuel</b> . The de	etails are as under:					
Sr. no.	Condition no. in which Amendment is proposed.	As per EC	As per proposed amendment	Justification			
1	SECTION A-3 A	IR					
	CONDITION	Sr No 1: Steam Boiler	Sr No 1: Steam Boiler				
		Capacity: 0.3 TPH	Capacity: 0.3 TPH				
		Fuel Used: Natural Gas	Fuel Used:				
			Natural Gas				
		Quantity: 500 SCM/Day	or				
			Diesel	Unit will not go with single option			
		Air Pollution Control measures: MCS &Adequate Stack height	Quantity	proposed both fuel Diesel &Natural			
			500 SCM/Day(Natural Gas)	Gas.			
			Or				
			25 Lit/Hr (Diesel)	In-case of non-			
			Air Pollution Control measures:	of them, they can			
			MCS & Adequate Stack height	switch over to available fuel.			
		Sr No 2: Thermic Fluid Heater	Sr No 2: Thermic Fluid Heater				
		Capacity: 2 Lacs Kcal/hr	Capacity: 2 Lacs Kcal/hr				
		Fuel Used: Natural Gas	Fuel Used:				
			Natural Gas				
		Quantity: 600 SCM/Day	or				
	Diesel						
--------------------------------	---------------------------------	--					
Air Pollution Control measures	Quantity:						
MCS & Adequate Stack height	600 SCM/Day						
	or						
	30 Lit/Hr(Diesel)						
	Air Pollution Control measures:						
	MCS & Adequate Stack height						

- PP was called for presentation in the SEAC meeting dated 05.08.2021.
- During the meeting dated 05.08.2021, technical presentation made during the meeting by technical expert of PP, M/s. Aqua Air Environmental Engineering Pvt. Ltd and Project Proponent.
- PP presented that they have applied for EC-Amendment for change of fuel in earlier EC order.
- PP presented the following documents:
  - Revised flue gas matrix mentioning Natural gas or diesel as fuel and Multicyclone separator as APCM for boiler and thermo pack.
- Committee found submission of project proponent satisfactory.
- After detailed deliberation, Committee unanimously decided to recommend grant of EC Amendment to SEIAA, Gujarat with additional condition as mentioned below and change in "Condition No. 31" as follows and with remaining condition unchanged in EC granted by SEIAA, Gujarat vide Letter No. SEIAA/GUJ/EC/5(F)/843/2020 Date: 07/07/2020.

## Condition No. 31 shall now be read as under:

31. Unit shall not exceed fuel consumption for boilers, Thermo pack and D G Set as mentioned below:

Sr. No.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
1.	Steam Boiler (0.3 TPH)	30/0.5	Natural Gas OR	500 SCM/Day	PM SO ₂ NO _X	MCS &Adequate Stack Height

								1			
					Di	esel	OR				
							25 Lit/Hr.				
								-			-
			Thermic								
			Fluid		Natu		600			MCS	
		2	Heater	30/0 5	Natu	ral Gas	SCM/Day				
		2	(2	00,0.0	(	OR			8 St	Adequate	
			(∠ LacKcal/Hr)		D.		UR		51	ack Height	
			Lacitedi/Tity		DI	esei	30 Lit/Hr.				
			D.C. Sot					-			-
		3	D.G. 361	11/0.25	Di	esel	10 lit/Hr.		Ade	quate Stack	
			(65 KVA)							Height	
19	SIA/0	GJ/INE	2/215812/202	21 <b>M/s. W</b>	orld Cł	nem Indu	Istries			EC-Amend	ment
				Plot N	0 C-1E	8/407/4 6		Tal· Ar	oklochwar		
						004440		, 1 al. Al	ikiesi iwai,		
				Dist. E	snaruch	394116					
• T	his is a	an exp	ansion projec	t for manu	ufacturir	ng of "Syi	nthetic Orga	nic Che	emicals" [AF	PI & its Interm	nediates] for
w	hich w	as ac	corded Enviro	nmental C	learand	e vide let	tter no. SEIA	A/GUJ	/EC/5(f)/68	0/2020 Date:	09/06/2020
- N		oioct	propopont bas	annlind (	onlino v	vido prop	ncal no SIA		ייי 12/2158/2/י	2021 for EC	Amondmont
	юw, рі								)2/21J042/		
Ir	I EC I	etter n	0. SEIAA/GU	J/EC/5(F)	/680/20	20 Date:	: 09/06/2020	J for CI	nange of C	MEE facility	for waste
v	ater d	ispos	al. The details	are as ur	nder:						
Sr.	Cond	ition n	o. As per EC	)		As per p	proposed		Justificatio	n	
no.	in whi	ch				amendr	nent				
	Amer	dmen	t is								
	propo	sed.									
1	SECT		A-2 Water								
	A	۹2.	The er	itire ind	lustrial	The	entire ind	ustrial	At the time	e of issuance	of EC, the
	Cor	ndition	effluent	after pro	posed	effluent	after pro	posed	Ankleshwa	ar was cove	red under
	und	ler the	expansior	n (1.33	KLD)	expansi	on (1.33	KLD)	CPA. He	enceforth, H	lonourable
	Wa	ter Act	shall be	treated	in in-	shall b	e treated	in in-	Committee	e denied fo	r dispose
			house ET	P consist	ting of	house I	ETP consist	ing of	their Wa	stewater in	Common
			primary	treatment	plant	primary	treatment	plant	Facility t	nose are le	ocated in
	Sp	ecific	and treate	ed effluen	t shall	and treat	ated effluent	t shall	Critically p	olluted Area	(CPA-i.e.,
	Con	dition:	be sent to		N MEE	be sent	to common	MEE	BEIL, Ank	eshwar).	
		18	of BEIL,	Dahejfor	tinal	ot BEIL	., Ankleshw	ar for	Right No	w. there is	no such
			treatment	and dispo	osal.	TINAI	treatment	and	restrictions	impose	ed on
						uisposa	1.		Ankleshwa	ar as per OM	F. No. 22-
									23/2018-1/	All dated 28	th January.

	2021.
	We got permission for disposal of treated effluent to CMEE of BEIL, Ankleshwar.
	Membership letter No. MEE/PAN/014 Dated: 05-03-21.

- PP was called for presentation in the SEAC meeting dated 05.08.2021.
- During the meeting dated 05.08.2021, technical presentation made during the meeting by technical expert of PP, M/s. ENVYCRAFT ENVIRONMENTAL SERVICES and Project Proponent.
- PP presented that they have applied for EC-Amendment for change of CMEE facility in earlier EC order.
- PP presented the following documents:
  - ✓ Membership certificate of CMEE of M/s BEIL, Ankleshwar.
- Committee found submission of project proponent satisfactory.
- After detailed deliberation, Committee unanimously decided to recommend grant of EC Amendment to SEIAA, Gujarat with additional condition as mentioned below and change in "Condition No. 18" as follows and with remaining condition unchanged in EC granted by SEIAA, Gujarat vide Letter No. SEIAA/GUJ/EC/5(F)/680/2020 Date: 09/06/2020.

Condition No. 18 shall now be read as under:

18. The entire industrial effluent after proposed expansion (1.33 KLD) shall be treated in in-house ETP consisting of primary treatment plant and treated effluent shall be sent to common MEE of BEIL, Ankleshwar for final treatment and disposal.

20	SIA/GJ/IND2/215589/2021	M/s. Raycon Distributors	EC-Amendment
		47/1/15, GIDC-Nandesari, Vadodara, Dist: Vadodara-	
		391340	

- This is an expansion project for manufacturing of "Synthetic Organic Chemicals" [API & its Intermediates] for which was accorded Environmental Clearance vide letter no. SEIAA/GUJ/EC/5(f)/1444/2020 Date: 03/12/2020
- Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/215589/2021 for EC-Amendment in EC letter no. SEIAA/GUJ/EC/5(F)/1444/2020 Date: 03/12/2020 as under:

Sr. no.	Condition no.in whichchan gespropos ed.	AsperEC	As per proposedame ndment	Justification	
------------	-----------------------------------------------------	---------	---------------------------------	---------------	--

1.	A. 4– 44	All the	All the	The unit is having process & fugitive
		hazardous waste	hazardous waste management	emission of SO2. It is normally absorb
		manageme	shall be taken	with sodium hydroxide with 8 to 9 pH.
		nt shall be taken care	care as mentioned in	It forms sodium sulphite solution.
		as	Hazardous	Now unit want to absorb the SO2 gas with
		mentioned in	waste generation table	soda ash and it forms to sodium bisulphite
		Hazardous		solution.
		waste generation		Unit would like to sell sodium sulphite
		table		solution and/or sodium bi sulphite to
				actual end users.

- PP was called for presentation in the SEAC meeting dated 05.08.2021.
- During the meeting dated 05.08.2021, technical presentation made during the meeting by technical expert of PP, M/s. JYOTI OM CHEMICAL RESEARCH CENTRE PVT.LTD and Project Proponent.

PP presented that they have applied for EC-Amendment for change of mode of disposal of Hazardous waste.

- PP presented the following documents:
  - Revised Hazardous waste matrix with mentioning disposal of process scrubbing media as sodium sulphite solution or sodium bisulphate solution.
  - Technical expert of PP presented that unit have already obtained CCA for disposal of process scrubbing media as sodium bi sulphite solution as hazardous waste due to usage of soda ash as scrubbing media for alkali scrubber in place of earlier EC granted for scrubbing media disposal as sodium sulphite solution.
- Committee found submission of project proponent satisfactory.
- After detailed deliberation, Committee unanimously decided to recommend grant of EC Amendment to SEIAA, Gujarat with additional condition as mentioned below and change in "Condition No. 44" as follows and with remaining condition unchanged in EC granted by SEIAA, Gujarat vide Letter No. SEIAA/GUJ/EC/5(F)/1444/2020 Date: 03/12/2020.

Condition No. 44 shall now be read as under:

Sr. no.	Type/Na me of Hazardou	Specific Categor Source y and of Schedul		Quantity (MT/Annum)			Management of HW
	s waste	generati on (Name of the Activity, Product etc.)	e as per HW Rules.	Exist ing	Propo sed Increa sed/ Decre a Sed	Total	
1	ETP Sludge	Effluent Treatme nt	35.3	6.00	-6.00	0	Collection and Storage within premises.

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							Transportation and Disposal at TSDF, NECL.
2	Contamin ated Discarde d container s/ Bags, Drums, Carboys	Raw material s & Packagi ng	33.1	1.44 0	3.96	5.40	Collection, Storage and Decontamination within factory premises and send to actual users.
3	Distillatio n Residue	Product 1,2,3	36.4	0.24 0	0.760	1.00	Collection, Storage, Transportation, disposal at Co- Processing
4	Dilute HCI solution	Scrubbe r	37.1		210	210	Collection, Storage and Disposal to actual user having rule-9 permission.
5	Dilute Sodium sulphite solution/ Sodium bi sulphite solution	Scrubbe r	37.1		414	414	Collection, Storage and Disposal to actual user having rule-9 permission.
6	Used oil	Machine ries	5.1		0.1	0.1	Collection, Storage and Disposed to registered recycler.
7	Recovere d Solvent	Product 1,2,3	28.6	64.8	48.6	113.4	Collection, Storage and Reuse in process

21	SIA/GJ/IND2/214511/2021	M/s JAY GOPAL DYE CHEM	TOR-Amendment
		Plot No. 108/6 (New Survey No. 265), Plot No.	
		108/5(New Survey No. 262), Ravi Industrial Estate, B/h	
		Prestige Hotel, Bileshwarpura, Ta- Kalol, Dist -	
		Gandhinagar	

- This is an existing unit and proposed expansion for manufacturing of "Synthetic Organic Chemicals and SEIAA accorded Terms of Reference (ToR) vide letter no. SEIAA/GUJ/TOR/5(f)/12/2020 dated 07/01/2021.
- Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/214511/2021 for ToR-Amendment in ToR letter no. SEIAA/GUJ/TOR/5(f)/12/2020 dated 07/01/2021.
- PP request for change in address of plot as follows,
  - Plot No. 108/6 (New Survey No. 265), Plot No. 108/5(New Survey No. 262), Ravi Industrial Estate, B/h Prestige Hotel, Bileshwarpura, Kalol, Gandhinagar in place of Plot No. 108/6 (New Survey No.

265), Plot No. 108/5(New Survey No. 263), Ravi Industrial Estate, B/h Prestige Hotel, Bileshwarpura, Kalol, Gandhinagar i.e New survey no -262 in place of 263.

- PP was called for presentation in the SEAC meeting dated 05.08.2021.
- Project proponent (PP) and Technical expert from M/s. B.S.Rana remain present during video conference meeting.
- PP presented the following:
  - Sale deed document along with land possession document for amended plot.
  - > Request letter by PP for change address mentioned in ToR letter dated 07/01/2021.
  - > ToR Letter dated 07/01/2021 of proposed project.
- Committee asked for purposed of amendment of plot, technical expert of PP informed that by mistake of them, they had submitted ToR application with mentioning new survey no- 263 in place of 262.
- Committee found submission of project proponent satisfactory.
- <u>After detailed deliberation, Committee unanimously decided to recommend grant of TOR –</u> <u>Amendment to SEIAA, Gujarat with change in address shall be read as follows and with remaining</u> <u>condition unchanged in TOR granted by SEIAA, Gujarat vide Letter No. SEIAA/GUJ/TOR/5(f)/12/2020</u> <u>dated 07/01/2021</u>
  - Plot No. 108/6 (New Survey No. 265), Plot No. 108/5(New Survey No. 262), Ravi Industrial Estate, B/h Prestige Hotel, Bileshwarpura, Ta- Kalol, Dist – Gandhinagar

22	SIA/GJ/IND2/213826/2021	M/s. Chaitanya Life Science Pct Ltd	EC- Corrigendum
		Plot no. 769/3/A/B/C, Jhagadia GIDC Mega Estate, Ta	
		- Jhagadia,Dist - Bharuch	

- This is an existing unit proposed for expansion of manufacturing of "Synthetic Organic Chemicals [API and API Intermediates" for which was accorded Environmental Clearance vide letter no. SEIAA/GUJ/EC/5(f)/1512/2020 Date:15/12/2020
- Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/213826/2021 for EC-Corrigendum in EC letter no. SEIAA/GUJ/EC/5(f)/1512/2020 dated: 15.12.2020 in which there is typographical error in plot number of unit. The details are as under:

Sr. no.	Plot No. as EC	New Plot no. for which is proposed
1.	Plot No. 769/3/B/C	Plot No. 769/3/A/B/C

- During meeting dated: 05.08.2021, committee noted that there is a typographical error in plot number of the unit.
- PP presented that there is typographical error in EC order accorded by SEIAA inplot number of the unit. PP

presented GIDC plot allotment letter for same plot.

Committee noted that there is a typographical error related to plot number in address mentioned in EC order was inadvertent.

<u>After detailed deliberation, Committee unanimously decided to recommend grant of EC –Corrigendum</u> to SEIAA, Gujarat with change in plot number of unit from "Plot No. 769/3/B/C to Plot No. 769/3/A/B/C" with remaining condition unchanged in EC granted by SEIAA, Gujarat vide Letter No. SEIAA/GUJ/EC/5(f)/1512/2020 dated Dec 15, 2020.

23	SIA/GJ/IND2/214780/2021	M/s. Colorant Limited	EC-Corrigendum
		T-15, Saykha Industrial Estate of GIDC, Tal. Vagra,	
		Dist. Bharuch, Gujarat	

- This is a Greenfield project proposed for manufacturing of "Synthetic Organic Chemicals" [Dyes intermediate] for which was accorded Environmental Clearance vide letter no. SEIAA/GUJ/ EC/ 5(f)/631/2021 dated 11/05/2021.
- Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/214780/2021 on dated 09/07/2021 for EC-Corrigendum in EC letter no. SEIAA/GUJ/EC/5(f)/631/2021 dated: 11.05.2021 in which there is typographical error and details are as under:

Sr. No.	Condition No.	EC Conditions	Corrigendum Required	Remarks
1.	Subject & Paragrap h 2 A.3 (27)	Environment Clearance to M/s. Colorant Ltd. for setting up manufacturing plant of 'Synthetic Organic Chemicals' [Synthetic Rubber] at Plot No. T -15 in Saykha industrial estate, Tal: Vagra, Dist: Bharuch. Gujarat. In Category 5(f) of Schedule annexed with EIA Notification dated	Environment Clearance to M/s. Colorant Ltd. for setting up manufacturing plant of 'Synthetic Organic Chemicals' [Dye Intermediates] at Plot No. T -15 in Saykha industrial estate, Tal: Vagra, Dist: Bharuch. Gujarat. In Category 5(f) of Schedule	All the products are dye intermediates and end use of product is in dye manufacturing Refer following <ul> <li>EIA Report</li> <li>Undertaking by consultant at the time of EIA report submission.</li> <li>Appraisal Presentation</li> </ul>
		14/09/2006.	annexed with EIA	<ul> <li>SEAC Format</li> </ul>

	Notification 14/09/2006.	dated	

Sr. No.	Condition No.	EC Conditions	Corrigendum Required	Remarks
2.	A.5 (Other) 32	All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s. Excel Enviro Tech and submitted by project proponent and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.	All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by MIs M/s. Envisafe Environment Consultants and submitted by project proponent and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.	EIA Report prepared by M/s. Envisafe Environment Consultants. Refer following • ToR Granted • EIA Report • Undertaking by consultant at the time of EIA report submission. • Appraisal Presentation • SEAC Format • Minutes of Meeting

- During meeting dated: 05.08.2021, committee noted that there is a typographical error in Subject & Paragraph 2 A.3 (27). The facts were verified with EIA report and undertaking by consultant at the time of submission.
- Committee noted that there is a typographical error in 'Synthetic Organic Chemicals' [Dye Intermediates] in place of 'Synthetic Organic Chemicals' [Synthetic Rubber] at Plot No. T -15 in Saykha industrial estate, Tal: Vagra, Dist: Bharuch. Also, Committee noted that EIA report was prepared by M/s. Envisafe Environment Consultant and by mistake it was mentioned M/s.Excel Enviro Tech in EC order vide condition no A.5(other) 32.

- Committee noted that SEAC meeting held on 30/01/2021 for EC order corrigendum vide letter dated 11/05/2021 showing consultant name for EIA submission by M/s. Envisafe Environment Consultant.
- Committee noted that the typographical error in the EC order accorded by SEIAA was inadvertent.

<u>After detailed deliberation, Committee unanimously decided to recommend grant of EC – Corrigendum</u> to SEIAA, Gujarat with amended shall be read as "'Synthetic Organic Chemicals' [Dye Intermediates] in place of 'Synthetic Organic Chemicals' [Synthetic Rubber]"in Subject & Paragraph 2 with remaining condition unchanged in EC granted by SEIAA, Gujarat vide Letter No. SEIAA/GUJ/ EC/ 5(f)/631/2021 dated 11/05/2021 and condition no A.5(other) 32 shall be read as follows,

## condition no A.5(other) 32 shall now be read as under:

All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s. Envisafe Environment Consultants and submitted by project proponent and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.

24	SIA/GJ/IND2/216106/2021	M/s. BBELL INDUSTRY LLP.	EC-Corrigendum
		Plot No. DP-119, GIDC Saykha, Sayakha, Taluka -	
		Vagra, District - Bharuch, Gujarat	

- This is a Greenfield project proposed for manufacturing of "Synthetic Organic Chemicals" [Dyes intermediate] for which was accorded Environmental Clearance vide letter no. SEIAA/GUJ/EC/5(f)/866/2020 dated 17/06/2021.
- Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/216106/2021 on dated 09/07/2021 for EC-Corrigendum in EC letter no. SEIAA/GUJ/EC/5(f)/866/2020 dated: 17.06.2021 in which there is typographical error and details are as under:

Sr. no.	Name as EC Amendment	Changes Required
1	BBELL INDUSTRY	BBELL INDUSTRY LLP.
2	Condition No. A.3 (20) In Point – VI on Page – 2 written as "shall be treated as null and Void"	Condition No. A.3 (20) "shall be now read as under"

- During meeting dated: 05.08.2021, committee noted that there is a typographical error in name of unit and condition no-A.3 (20).
- Committee noted that PP presented Environment Clearance accorded vide letter no.

SEIAA/GUJ/EC/5(f)/1091/2020 dated 30/09/2020 on the name of BBELL INDUSTRY LLP With ZLD scheme. Then PP obtained EC amendment was applied on 15/01/2021 for Change of effluent disposal mode from ZLD to CETP and accordingly EC Amendment issued vide letter no. SEIAA/GUJ/EC/5(f)/866/2020 dated 17/06/2021. Name of the company in subject is written as "BBELL INDUSTRY" instead of "BBELL INDUSTRY LLP". PP submitted EC and CTE order issued by GPCB showing name of unit as "BBELL INDUSTRY LLP". Also Committee noted that Condition No. A.3 (20) "shall be now read as under" in place of Written as "shall be treated as null and Void" in EC order dated 17/06/2021.

Committee noted that the typographical error in the EC order accorded by SEIAA was inadvertent.

After detailed deliberation, Committee unanimously decided to recommend grant of EC – Corrigendum to SEIAA, Gujarat with amended shall be read name of unit as "BBELL INDUSTRY LLP in place of BBELL INDUSTRY"in Subject & Paragraph 2 with remaining condition unchanged in EC granted by SEIAA, Gujarat vide Letter No. SEIAA/GUJ/ EC/ 5(f)/631/2021 dated 11/05/2021 and condition no A.3(20) amended as follows,

Condition No. A.3 (20) "**shall be now read as under**" in place of Condition No. A.3 (20) In Point – VI on Page – 2 written as "**shall be treated as null and Void**".

25	SIA/GJ/IND2/215019/2021	M/S. ANUGRAH PHARMA	EC-Corrigendum
		Plot No. 39/9, GIDC Jhagadia, Bharuch Gujarat	
		393110	

- This is a Greenfield project proposed for manufacturing of "Synthetic Organic Chemicals" for which was accorded Environmental Clearance vide letter no. SEIAA/GUJ/EC/5(f)/705/2021 dated: 28.05.2021.
- Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/215019/2021 on dated 09/07/2021 for EC-Corrigendum in EC letter no. SEIAA/GUJ/EC/5(f)/705/2021 dated: 28.05.2021 in which there is by mistake in water condition as under:

Sr. no.	Condition no. in which Corrigendum required.	Detail as per EC	Required Corrigendum	Remark
1.	Section A.2 Wa	ater		
	Condition 13.	Sub Point under- Low COD and TDS effluent (36.70 KLD) > 27 KLD,MEE condensate and 3 KLD ,domestic effluent shall be further treated in ETP consists of secondary &	Low COD and TDS effluent (36.70 KLD) To be removed said sub Point	*Kindly remove 2 nd sub point All conditions apart from this will remain

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Tertiary ETP followed by RO. 23.50 KLD, RO permeate shall be reused withir premises and 7 KLD. RO reject	unchanged.
KLD. RO reject shall be treated in MEE.	

- During meeting dated: 05.08.2021, committee noted that there is a mistake in one of the water condition and subpoint for Low COD and TDS effluent shall be removed.Committee noted that there is a mistake in SEAC recommendation letter. PP informed that they have submitted proposal of waste water disposal to M/s NCT in place of MEE and RO plant at time of appraisal of the unit.
- Committee noted that the mistake in condition of A.2 Water (13) in SEAC Recommendation EC letter was inadvertent.
- <u>After detailed deliberation, Committee unanimously decided to recommend grant of EC –</u> <u>Corrigendum to SEIAA, Gujarat with change in "Condition No: A.2 Water(13)" as follows and with</u> <u>remaining condition unchanged in EC granted by SEIAA, Gujarat vide Letter No.</u> <u>SEIAA/GUJ/EC/5(f)/705/2021 dated: 28.05.2021</u>

Following subpoint in Condition no – A.2 Water(13) for low COD and TDS effluent(36.70 KLD) shall be removed

27 KLD,MEE condensate and 3 KLD ,domestic effluent shall be further treated in ETP consists of secondary & Tertiary ETP followed by RO. 23.50 KLD, RO permeate shall be reused within premises and 7 KLD. RO reject shall be treated in MEE.

## The meeting ended with a vote of thanks to the Chair.

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## Minutes approved by:

1.	Shri Akshay Kumar Saxena, Chairman, SEAC	
 2.	Dr. S. C. Pant, Vice Chairman, SEAC	
3.	Dr. M. N. Patel, Member, SEAC	
 4.	Shri D. C. Chaudhari, Member, SEAC	

5.	Shri J. K. Vyas, Member, SEAC	
6.	Shri Anand Zinzala, Member, SEAC	
7.	Shri B. M. Tailor, Member, SEAC	
8	Shri A. V. Shah, Secretary, SEAC	

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